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Editorial Notes.

The Oil Trade of Scotland.

The oil industry of Scotland may be said to have benefited to a not inconsiderable degree during the past year by the general upheaval in the Russian petroleum trade. The shale industry has prospered in a manner which may be regarded by investors as highly satisfactory, and, seeing that the shares of the operating concerns have made such upward strides, it would seem that, as a commercial investment, they are are now approaching a 6 per cent. standard investment, instead of being reckoned amongst the category of mining and industrial companies appraised by the public to return 7½ per cent. Whatever can be said of the value of holdings in other petroleum companies, those of such concerns as the Pumpherston, the Broxburn, Young's and the Oakbank, whose interests are centred in the development and success of the Scotch mineral oil trade, are undoubtedly in great favour, and worthily so. As to the present year, there is every reason to believe that a further career of even greater prosperity is in store for the Scotch oil companies.

The Latest from Baku.

Although the Baku fields are still cut off from the outside world as far as telegraphic despatches are concerned, we are in possession of statements from those who have recently visited the Caucasus, which go to shew that matters are progressing fairly satisfactorily, and the fields are being rapidly restored to their normal condition. Indeed, according to an approximate calculation, the production during the first half of November amounted to 12,000,000 poods of crude oil, whilst the total production for November is estimated at about 30,000,000 poods, as against a production of only 12,600,000 poods for the whole of October. There is, however, much excitement still prevailing among the workmen at Baku, and it is quite possible that another interruption of work may occur.

In view of the undefined condition of the trade, business on the market cannot develop in a natural manner. There is only a small quantity of spot crude oil on offer, while crude for yearly contracts is quoted at 18-19 copecs. The prices are thus gradually returning to their normal level, and this will probably lead to a further improvement in the market.

Petroleum as a Cure for Typhoid.

The claims of petroleum as a healing agent have long been recognised, but we now find eminent medical authorities expatiating upon its merits for the treatment and cure of typhoid or enteric fever. In a recent lecture at St. George's Hospital, London, by the eminent physiologist, Dr. William Ewart, the use of petroleum was discussed at some length. It was shewn that petroleum undergoes no chemical change in the stomach, and is not absorbed; hence its lubricating, soothing effects are exerted throughout the entire length of the alimentary canal. Properly purified petroleum, it was said, is acceptable to all patients in almost any dose. Two teaspoons full every four hours is the maximum dose for adults, as prescribed by Dr. Ewart, but he stated that the dose might easily be increased, inasmuch as "frequency in the repetition of the dose is part of the indication both for the sake of lubrication and of cleansing." Some years ago, another eminent medical authority, Dr. Wm. Duffield Robinson strongly advocated the internal use of petroleum in phthisis, as well as in tubercular and other forms of diarrhœa, but apparently it did not gain much vogue at the time. At present, however, it seems to be in favour generally both with the medical profession and the public, and therefore we may hope to see much headway made as time goes on.

America's November Petroleum Exports.

The month of November registered a heavy decline in the exports of American petroleum and its products, for the figures were the smallest recorded since February last. For the month, the total exports of petroleum from the eastern ports of the United States amounted to 82,264,000 gallons, and were valued at $5,770,800, the decrease as against the figures for the preceding month being 21,400,300 gallons in amount, and $1,131,000 in value. When compared with the figures of a year ago, the decrease is not so great, being only 6,400,000 gallons in amount, and $790,000 in value. The exports for the month were distributed as follows:—Crude, 6,774,534 gallons; naphthas, 1,684,977 gallons; illuminating oils, 56,264,481 gallons; lubricating oil and paraffin, 9,954,855 gallons; residuum, 7,585,530 gallons.

The following table gives the exports in gallons of mineral oil and its various products during November, as against the same period for 1904:—

	1905.	1904.
Crude	6,774,534	7,713,991
Naphtha	1,684,977	881,005
Illuminating	56,264,481	65,573,016
Lubricating and paraffin..	9,954,855	8,932,854
Residuum	7,585,530	5,601,464
Total	82,264,377	88,702,330

Possibly for the first time in the history of America's oil export trade, the shipments of oil to foreign ports from Philadelphia have exceeded those from New York. The official figures for November give the total amount of petroleum and its products exported from Philadelphia at 40,990,981 gallons, while the exports from New York amounted to 37,943,648 gallons. This is therefore a difference in favour of Philadelphia of 3,047,335 gallons.

OIL PROSPECTING IN GERMANY.

The lands at Wietzenbruch, near Celle, in the Hanover oil fields, which in their time disappointed the hopes put on them, are to be again tested for petroleum by means of a new deep bore hole. At Bemotze a well was completed with a yield of 54 barrels daily; two more wells are in course of drilling, which promise to yield good results. The well which is being drilled near Bentheim is reported to have reached a depth of 100 metres without having so far struck any oil. The Erdoelwerke Germania has five producing wells, each about 190 metres deep, which yield by pumping about 60,000 barrels of crude oil per annum, which oil is sold to the Celle-Wietze Co. The Süddeutsche Erdoelbohrgesellschaft has been dissolved, and their rights have been taken over by the Erdoelbohrgesellschaft Odheim. The adjoining lands have been taken up by the Internationale Bohrgesellschaft.

◆

RUSSIAN NOTES.

The Moscow Oil Market is still feeling the effects of the great general railway strike, for tank waggons are coming very irregularly. This is the more serious, as the Moscow manufacturers have become so accustomed to prompt and regular deliveries of oil fuel that nine firms out of ten have accommodation for storing not more than one day's supply, and some even less than that.

Liquid Fuel Stocks on the Volga.—Now that navigation on the Volga has closed, a final calculation of the available stocks of liquid fuel has been made. It is found that there are supplies sufficient for the needs of the Interior in liquid fuel to last until the 1st of May (o.s.), when the navigation will be again open. Up to that time all contracts can be fulfilled without any difficulty.

St. Petersburg Oil Market.—Notwithstanding the great irregularity in the arrival of supplies, there is no shortage felt in St. Petersburg in either illuminating or fuel oil, and the present troublous times are passing fairly quietly for the oil trade. Prices remain unchanged, and in liquid fuel there is a weakening of quotations. This may have the effect of preserving for the petroleum industry a considerable part of the local liquid fuel market which was being lost through the high prices. Lubricating oils are unchanged, whilst in benzine there is a rise in price owing to the limited stocks available.

◆

THE DEEPEST WELL DRILLED IN AMERICA.

The deepest well ever drilled in America has been sunk by the Forest Oil Co. at West Elizabeth, Pennsylvania, twelve miles from Pittsburg, to a depth of 6,000 feet. It was started 100 feet below the Pittsburg coal vein. There was only one string of casing in the well, it being 6¼ inches diameter and 900 feet deep. At the depth of 2,285 feet a flow of gas was struck which was sufficient to make steam to drill the rest of the hole. At 5,500 feet the temperature was 129 degrees. At that rate heat equal to the boiling point of water—212 degrees—would be found at the depth of 9,000 feet. At the depth of 5,500 feet the crown pulley broke, cut the rope, and dropped the tools 100 feet, which caused a stay of proceedings. To drill this well it was necessary to have extra heavy machinery, including two 25 horse-power engines, two 25 horse-power boilers, three bull ropes, 16 inch belt, 13½ feet band wheel, 5 inch forged shaft and crank, 4½ feet flanges, two brakes on the bull wheels, and two cables spliced together, making about 6,000 feet. One cable 2¼in. in diameter, and weighing 5,600 lbs., was used at the bottom of the well, and the cable that was used on the top of the hole was 2⅞-in. in diameter, and weighed 8,400 lbs., making the total weight of cable 14,000 lbs., which would represent a value of about £450. The tools used to drill it were the ordinary size. The approximate cost of the well was about £8 000.

◆

PETROLEUM DEVELOPMENTS IN GERMANY.

The borings for petroleum near Quickborn have proved fruitless, and the derrick has been transferred to Frestedt. The boring is carried on by steam power.

The tar distillery at Grabow has been transformed into a petroleum refinery, the crude oil for which is brought up from Hanover in the company's own tank waggons. At present the refinery has a capacity of treating 10,000 tons of oil per annum. Several school communities have leased out their school lands for petroleum explorations. The Internationale Bohrgesellschaft is paying to the Bainetze parish 8,000 marks per annum in rents.

◆

THE CELLE-WIETZE PETROLEUM COMPANY.

The operations of the refineries of the above company are proceeding in a very satisfactory manner. Benzines of different specific gravities and illuminating oils are now being produced, as well as selling considerable quantities of crude oil for larger refineries. The Celle-Wietze Co. is also manufacturing a gas oil, which is readily bought up by other refineries and is used for motors. In the near future the company also proposes to manufacture paraffin scale and heavy machine oils. As a residue of the distillation it obtains a light goudron, which is used in the manufacture of a special roofing material, and also a pure petroleum coke, which is used for fuel purposes and for the manufacture of carbons for electric arc lamps. The refinery supplies illuminating oil to the local inhabitants at the price of 19 marks per 100 kilogrammes.

◆

MOTOR BOATS FOR LIBERIA.

The United States Consul at Monrovia reports that, from the physical aspect of the country, as well as the natural contour of Liberia's coast line, motor boats would supply a long-felt need in districts which are entirely without facilities for communications except those of the traditional canoe. The largest boat now used measures about 50 feet in length and 12 feet beam, with a propelling force of 15 horse-power. It is constructed so as to be able to use either gasolene or kerosene oil. The latter, however, has the preference.

The Republic of Liberia, in its present state of development is, says the United States Consul, ripe for a trade of this kind.

THE MINERAL OIL TRADE IN SCOTLAND DURING 1905.

The past year has been a most successful one in connection with the mineral oil trade of Scotland. It has been an improvement upon many of its predecessors for many reasons, but chiefly because the eruptions in the Caucasus have had their effect upon the other producing countries, and in the general increase of prices Scotland has had her fair share. The improvement, though coming too late to make any appreciable difference to the balance sheets of the operating companies during the year, is bound to considerably affect their profits, although many of the oil concerns had already placed a large percentage of their oils before the Russian disasters occurred.

In lubricating oil, the same disasters created a brisk demand, and consequently prices advanced as much as 30s. per ton from the low rates previously quoted. The Scotch companies are now said to be deluged with orders, and as contracting ahead for lubricating oil is not the general rule, they are securing substantial benefits.

The other liquid products from shale, consisting of naphtha and gas oil, have been sold at slightly lower prices than the previous year; but the solid products, such as sulphate of ammonia, solid paraffin and candles, have been marketed at prices which will compare favourably with the previous year's rates.

The shareholders of the four Scotch refining companies must have been particularly gratified on receiving the statement of profits for the financial year ending in April, 1905.

Pumpherston, £95,715 of profits, with 30 per cent. dividend; Broxburn, £72,918 of profits, with 15 per cent. dividend; Oakbank, £52,591 of profits, with 15 per cent. dividend; Young's, £101,113 of profits, with 6 per cent. dividend, and 6 per cent. contingent dividend on the B Debenture Bonds, thus making the return to these B Debenture holders 12 per cent.

These total gross results amount to £322,337, from which the directors prudently only divided about one-half, retaining the other part to strengthen their reserve and depreciation accounts. The wisdom of such a course is very evident by the public appreciation of their shares on the Glasgow Stock Exchange, and which we give below, with the comparison of values of the same time last year;—

	Dec. 30, 1904.	Dec, 30, 1905.	Rise.	Fall.
Pumpherston	60s.	76s. 6d.	16s. 6d.	—
Broxburn	£17¼	18⅛	17s. 6d.	—
Oakbank..	£17¼	17¾	10s. 0d.	—
Young's Ordinary ..	45s.	63s. 6d.	18s. 6d.	—
Young's B Debenture..	£114	£150	£36	—
Tarbrax Co.	—	35s. 3d.	—	—

The most prominent advances have taken place in the Pumpherston shares and Young's Ordinary and B Debentures, the last-named having reached the stage which suggest that, according to rumours, some arrangement is probable between the contingent rights of the B Debenture holders and the Ordinary shareholders, whereby a scheme may be evolved by the board of this company fair and equitable to the interests of both classes and with advantage to the company itself. This point, it will be remembered, was brought up at the annual meeting of the company in June last.

The Pumpherston Oil Co. carried through by the usual statutory meetings a resolution whereby their £10 shares, upon which £8 10s. was paid up, were reduced to shares of £1, with 17s. paid up.

The Tarbrax Oil Co., an offshoot of the Pumpherston Oil Co., commenced to produce crude oil early last month. The extensive shale fields of this company are being rapidly developed in a district of Scotland which has seen the vicissitudes of fortune displayed in no uncommon manner. The modern and economical plant erected there now is a typical instance of what can be done by force of character, lengthened experience, and, of course, the capital wherewith to take advantage of the latest improvements.

From the foregoing remarks it does not take a very big stretch of imagination to prophesy that a repetition of last year's profits and dividends is within the range of certainty when the companies issue their annual reports next spring; and neither is it very hazardous to forecast that for the succeeding year, 1906-7, with the price of burning oil and lubricating oil particularly having reached a higher price, they should easily exceed the profits for the year 1905-6 by a decided amount, and estimated to reach £100,100.

A review of this kind must not end without a reference being made to the improvements which are ever taking place in the appliances for the manufacture of the products from shale. Conspicuous amongst these has to be mentioned the claim put forward by Dr. McAlpine, London, of a process whereby large savings are likely to be affected, and which it is understood has been favourably received by the oil companies.

It is worth while calling attention to the interesting fact that the agitation of eight years ago for a bill in Parliament to raise the flash-point of imported oils has not been altogether lost upon the large importers of the world, writes a correspondent in the *Glasgow Herald*, as the undernoted table will shew:—

	Spec. Grav.	Abel Flash Point. Deg.	Candle Power.
American oils—			
"Royal Daylight" brand	803	83	18
"White Rose" brand..	795	104	16
Russian oils—			
"Rocklight" star and crescent brand	812	90	15
"Majestic" brand	822	92	16
"Homelight" brand	825	94	17
Galician oil—			
"Galician Petroleum"	810	83	16
Roumanian oil—			
"Roumanian Star"	810	81	16
Borneo oil—			
"Silver Spray"	820	88	16
Scotch oils—			
Young's crystal oil	800	128	18
Broxburn petroline	798	126	18
Pumpherston pearline..	798	126	18
Oakbank kerosene	797	126	18

It will be seen that since that time there has been a considerable improvement in the imported oils—certainly a move in the right direction, especially seeing that so much ignorance prevails upon the question.

THE RUSSIAN PETROLEUM COMPANIES' AGITATION.

During the present week Dr. Dvorkovitz has sent the following letter to the daily press:—

45, St. Mary Axe,
London, E.C.

Sir,—In my recent agitation against the management of two important Anglo-Russian petroleum companies, you will remember that I laid emphasis upon my allegation that two directors of the Russian Petroleum and Liquid Fuel Co. had carried on a series of share gambling transactions—they sold their shares when the market was high, and re-purchased them when the moment was favourable. That statement, as I pointed out at the time, was substantiated by the figures in the official records at Somerset House, and I was therefore amazed when the chairman of the company—the Hon. Evelyn Hubbard—told the shareholders at the extraordinary meeting that he had never sold "a single one of the shares."

In the face of the official figures, that remark struck me as being a "lie direct," and therefore in order to shew that I had not been actuated by any "personal motive," I had this followed up by a declaration, properly stamped and attested by a commissioner of oaths, that an examination of the files at Somerset House revealed that the holding of the Hon. Evelyn Hubbard, which in 1899 amounted to £10,000, had dropped in the year 1890 to £3,790.

You, Sir, were good enough to publish my letter in which I referred to this declaration, and in spite of the widespread comment which this has caused throughout business circles in the City, I am surprised to find that the Hon. Evelyn Hubbard has not seen fit to make any reply.

In some quarters, the plain denial made hy that gentleman at the meeting would cause the matter, which certainly had an unpleasant look, to be soon forgotten, but I am pleased to see that the Editor of the *Investors' Review* has determined that it shall not rest. He has, therefore, caused an independent examination to be made at Somerset House, and the result of this, which is published in the current issue of that journal, corroborates my statement in every detail. Therefore, he appeals to the Committee of the largest shareholders which the directors called together in making their investigation, to pay particular attention to that phase of the subject.

This brings me to say a word or two as to that "special Investigation Committee" of the Russian Petroleum and Liquid Fuel Co. As a matter of fact, this Committee, of which Mr. W. Douro Hoare, a colleague of the Hon. E. Hubbard upon two directorates, was chairman, met the day after the extraordinary general meeting of shareholders, and without making any investigation into the matters I had brought forward, it arrived "after consideration" (and at one sitting) at the following resolution:—

> "That this meeting is of opinion that the speech of the Chairman, together with the statements of Mr. H. N. Gladstone and Mr. W. B. Peat at the extraordinary general meeting of shareholders, held *the previous day*, constitutes a complete reply to the circulars issued by Mr. P. Dvorkovitz, and the meeting does not consider it necessary to take any further evidence in this matter."

Thus, the investigation I have so much desired, and for which that extraordinary meeting was called together, has been totally ignored, and instead of the many suspicious matters being probed to the bottom by a Committee who had no ulterior interests to serve, the members who composed the special committee, discharged their whitewashing business the same afternoon, and they, too, have done all they can to smooth over a number of transactions which still have a very ugly look.

I will not emphasise the significance of the delay in the issuing of the special Committee's report. The Committee met on the 7th of December and passed the resolution I have already given, and yet this was not sent to the shareholders until the end of last week. It would be very interesting to know why it was kept back 21 days when the characters of two gentlemen on the directorate of the Company had been attacked, their honour injured, and their actions held up to public ridicule. Surely such delay was unwarranted.

The crux of the whole matter is that the shareholders have been hoodwinked; their confidence has been placed in unworthy places, and, after the remarks of the Hon. Evelyn Hubbard that evidence would be courted, they have trusted a Committee to carry out an investigation which it was morally bound not to touch.

It is not for me to say what will now be done, but it is to be hoped that the shareholders will decide once and for all that they shall know the truth, not at the hands of their chairman, for they have seen that this is impossible, but as a result of the investigations of an independent Committee of shareholders, whose money is now unfortunately locked up in a concern in which, even by uniting, they can get little or no voice.

In the Russian Petroleum and Liquid Fuel Co. over 80 per cent. of the shareholders are of the small investing class, with holdings below £200, and this fact in itself should have been sufficient for the appointment of a Committee whereon the small investors should predominate. As for myself, I hold proxies from over 500 investors, and it certainly does seem iniquitous that this number between them could not get a voice upon that special Committee.

However, there is still hope that the subject will not be allowed to drop, for, as I have said, the matter is now attracting general attention, and this, in itself, will go far to bring about a satisfactory solution.

The fact that other technical journals than my own are shewing an interest in the subject, and that the daily press sees how advisable it is that a legitimate industry should not be ruined by the actions of unscrupulous company directors, plainly suggests to my mind that a day will come when investors in English petroleum enterprises will have their confidence re-established in concerns which, if properly managed, are capable of yielding results second to none.

I thank you, Sir, for allowing me to again trespass upon your valuable space, but it is with the knowledge that I am discharging a public duty, and that I am working in the interests of honesty and straightforward dealing, that I ask your indulgence.

Yours faithfully,
P. Dvorkovitz.

ROUMANIAN NOTES.

The State Lands Question.—The Roumanian Chamber of Deputies, on Saturday last, passed the new law for leasing of the State petroliferous lands by 68 votes against 2.

Mr. Lewis Hamilton, in conjunction with some friends, has formed a syndicate under the title of "Banca Moreni," with the object of developing some lands at Stavropoleos and Bana by means of borings.

The Vega Company's Refinery.—The refinery of the Vega Co. is now working with six stills, treating 400 tons of oil daily. When working to its full capacity the refinery will treat double that quantity.

The Romano-American Company's Refinery. — The refinery of the Romano-American Co. has commenced working with four stills out of the twelve, which the refinery will contain when complete.

Purchase of Concessions.—The Campina-Moreni Co. has purchased the concessions of Messrs. Pecici, Gheorghin and Ionescu at Campina-Poiana, as well as the old plot of Mr. Tack in the same locality.

A Well Fire.—Well No. 3 of the Mislisorea Co. at Bustenari was recently destroyed by fire. A fire also broke out on the property of the Moreni Co., and a building destined for a boiler house was destroyed by the flames.

Developments at Moreni.—Development work at Moreni is proceeding without interruption, and the number of borings there is growing daily. The borehole of the Moreni-Filipeshti Co. has reached a depth of 240 metres.

The Campina-Moreni Co. is working very actively with a view to increasing its production. Its well No. 1, at Moreni, which has been the greatest producing well in Roumania, has resumed flowing. The company has now started drilling a second well on the same plot.

Large Roumanian Refineries.—Of the Roumanian petroleum refineries which were in operation in 1905, the largest, *i.e.*, those with an output of more than 10,000 tons each were:—the Steaua Romana's, at Campina; the Aquila Franco-Romana (Desmarais Frères), at Malesti-Prahova; the Helios refinery of Messrs. Hagienof and Campeanu, at Cernavoda; Aurora refinery, at Floresti-Prahova; the Aurora refinery, at Colanu-Dambovitza; and Campeanu and Co., in the same place.

Liquid Fuel and the Roumanian Navy.—With the addition to the fleet of the Roumanian marine service of the steamer "Imperatul Trajan," this fleet will henceforth consume 10,000 tons of liquid fuel per annum. In order to ensure the prompt delivery of the oil for this purpose the Roumanian Government has ordered 20 new tank waggons of 11 tons' capacity each, and is going to erect a tank for storing 1,000 tons of oil, at a total cost of 132,000 francs.

Another New Company for Bustenari.—A syndicate has been formed, consisting of five gentlemen, members of the firms of Elias Ruzicka and Taubes and Alfred Loewenbach and Co., under the title of "Montana." The object is to exploit certain properties in Bustenari and other fields. The syndicate has already acquired the properties of Pisan and Clincin-Papa at Bustenari, and is going to increase the production of the same to a considerable extent by improving the old borings and sinking new ones. The capital of the syndicate is 250,000 francs.

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The Hannoversch-Westfallischen Erdoelwerke Co., of Wietze, in the Hanover oil fields, has struck oil in a borehole which yields about 300 barrels of a heavy crude oil per day. The well was drilled by Mr. Fritz Hasenbein, boring contractor of Sehnde.

During the Recent Discussions in the French Parliament concerning the new commercial treaty with Russia, a proposal was put forward by one of the speakers to offer to Russia in return for a reduction in duty on French wines imported into Russia a reduction of the duty on Russian petroleum oils into France.

AMERICAN NOTES

At Batson.—Drilling was being actively carried out in the Batson field during the first half of December, and eleven wells were being sunk. No wells, however, were brought in during that fortnight.

The Gulf Pipe Line.—From the latest information to hand, it appears that the Gulf pipe line proposition, about which so much was said some time ago, is not yet dead. Matters are progressing, and details are now being arranged.

Decline in Jennings' Production.—The production of the Jennings' field has suffered a serious decline owing to the Heywood Company's No. 4 well, which has been yielding 5,000 barrels per day, having entirely stopped flowing. The same company's No. 3 well also stopped about the middle of December, but is now doing about 3,000 barrels daily.

"A Coalinga Field Wonder."—A big gusher belonging to the California Oil Co., and named well No. 1, broke loose during the first week in December. At first, the well flowed about 100 barrels per day, but afterwards increased its force and also its flow, settling down eventually to a little over 1,000 barrels daily. The well is now looked upon as one of the wonders of the Coalinga field.

Spindle Top Well Sells for $25,000.—A well has recently been sold on the Keith-Ward tract on Spindle Top for $25,000. The well is one of the best producers on Spindle Top, and is making over 400 barrels per day. As to operations at Spindle Top, the average production of the famous producing district is now a little short of 4,000 barrels per day, some new wells having increased the production a few hundred barrels.

A New Producing District.—Latest advices from California state that an entirely new producing locality has been opened up by the Los Animus Oil Co., operating in one part of Santa Barbara. The company has just drilled its first well, which has come in a gusher, and is now doing about 600 barrels daily. The well is situated about five miles south-west of Los Anamos, and is six miles distant from the nearest producer, that being the Purisima well of the Union Oil Co.

Movement of Texas Crude Oil.—The movement of crude oil from Port Arthur during the first half of December amounted amounted to 128,919 barrels, and that of refined products to 130,715 barrels. The movement from Sabine during the same period was 65,953 barrels of crude, and 48,657 barrels of refined. The aggregate movement shewed a decline of 44,000 barrels of crude and 128,000 barrels of refined, as compared with the figures for the first half of November.

Important Oil Deal.—An oil deal of importance was consummated at Cleveland a few days ago, whereby the Central City Oil and Gas Co., a Wisconsin corporation, purchased of Ice, Stout, and Ridgeway 840 acres of oil leases in one body, south of Cleveland, the purchase price being given at $22,000 and a small well for $4,000, and six others for which the purchase price has not been announced. The company is said to have ample capital, and will begin extensive development work at once.

A New Company.—The Damon Oil Co. has been incorporated under the Indian Territory laws with a capitalisation of $50,000, and will operate leases held by it in the Cherokee shallow pool. The officers of the company are:—O. R. Howard, president; E. B. Howard, vice-president; and T. E. Smiley, secretary and treasurer. The president and treasurer of the company are experienced oil men, and will doubtless carry their company to a profitable development of the properties owned.

Activity in Indiana.—A communication from Marion, Ind., states that one of the most active spots in the Indiana field at the present time is west of Marion, in Howard county, where the Indiana Natural Gas and Oil Co. is pushing forward with the drill in order to get sufficient gas to accommodate its patrons in the gas lines. The operations are located in the vicinity of Greentown, and there 20 new wells have been drilled, of which number 14 are producers of gas, and the rest are either oil producers or dusters. While this company is anxiously looking for gas, it is also anxious to find oil which it can utilise for its new process of making gas.

OBTAINING PARAFFIN FROM MINERAL OIL.

Writing in a recent issue of *Naptha*, upon the above subject, Mr. William Henry MacGarvey and Dr. Sigm. Stransky state that in addition to the crystallisable paraffin the crude oils containing paraffin also contain wax-like paraffin, the separation of which has hitherto not been effected. What economic value a method possesses which permits the separation of this wax-like paraffin may be perceived from the fact that the production of natural earth wax (ozokerit) has been limited almost entirely to the orginal place of finding, which is Boryslaw in Galicia, and has, moreover, regularly decreased. The ceresin obtained therefrom through refining, which represents an uncrystallisable paraffin of high solidifying temperature, possesses a value four or five times greater than that of commercial paraffin.

According to the method in question it is possible to obtain a ceresin in all qualities, both in respect to the wax-like nature and in regard to the high solidifying point of the equivalent product, or to separate this from the mineral oils and from the crystalline paraffins which were contained in the mineral oils.

This method consists in withdrawing the paraffin separated in uncooled oils at the ordinary temperature (about 20° C.) by suction, filtration or hydraulic pressure. The paraffin taken from the uncooled oils contains heavy, wax-like paraffin. If the oil is treated according to the ordinary method, that is, if it is entirely cooled as it is, then the crystalline paraffin separates with the wax-like, and by filtration or pressure a mixture of both paraffins is obtained, in which crystallisable paraffin quantitatively excels, and from which it has hitherto been impossible to separate the component parts.

In consequence of avoiding the crystallisable paraffin, there exists, on the contrary, the paraffin obtained from the uncooled oils, as mentioned, weighed from the uncrystallisable wax-like paraffin which can be made pure by pressure with steam, or better, with water, into heated hydraulic presses under simultaneously regulated temperature. If the temperature in the heated press plates under simultaneous pressure is gradually increased to about 65° C., then a smaller per cent. of adhering crystallisable paraffin melted out from the press will be sufficiently pressed, while the ceresin-like paraffin of from 69° to 74° C. solidifying point remains in the press cloths.

It must be noticed that in the well-known heat pressing of paraffin the idea is to remove the adhering oil from the paraffin by pressing out, which is easily accomplished with increased temperature. In the method in question, on the other hand, the heat pressing under gradual increase of temperature has for its object the removal of the still adhering crystallisable paraffin from the wax-like paraffins which have become separated from the oils before cooling.

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The Port Authorities, of Rotterdam, are making use for their services a number of petroleum motor boats, some being used also by the river police. Public transport of goods by motor boats does not exist yet.

THE NEW RUSSIAN EXCISE LAW.

According to latest information from Russia, it is proposed from the 1st of January, 1906 (o.s.), to bring into force the new law for charging an excise duty of 60 copecs per pood on all distilled products of petroleum, the only oils not paying duty being residuals and crude oil. Hitherto, only illuminating oil was subject to payment of excise duty, and the regulations governing the methods of charging the excise, therefore, have now to be modified so as to include all other products.

Experience has not yet taught the application of any quick and accurate method of distinguishing between heavy oils and refined oils discoloured by the addition of residuals or crude oil. Consequently, when the new law comes into force, each cargo or consignment of residuals will have to be tested in order to ascertain whether it is not a mixture of oils with residuals or crude. This threatens to cause delays in the dispatch of cargoes, and may seriously impede the shipments of liquid fuel. In view of this, the petroleum producers propose to petition the Government to defer introducing the new law at least until the 1st of April (o.s.), to avoid complications in its application.

The necessity is urged for carefully considering the technical side of the question and hearing the competent views of Baku engineers and business men. It is further pointed out that the postponement would not involve any loss to the treasury, as during the winter there are no shipments from Baku to the Interior, and only small quantities are forwarded by the Transcaucasian Railway and by ships to Petrovsk. The shipment of large quantities commences with the opening of navigation, and by that time it will be possible to work out simple forms for the technical determination of petroleum products, which would equally benefit the treasury as well as the petroleum producers.

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NEW COMPANY.

Egyptian Petroleum Company, Ltd.

Registered December 22nd. Capital, £50,000 in £1 shares. Object: to acquire, work, and turn to account any petroleum or oil-bearing lands in Egypt or elsewhere; to win, refine, prepare for market, and deal in petroleum and other oils; to sink wells and make borings, etc. The signatories are:—

	Shares.
W. G. H. Monypenny, 53, New Broad Street, E.C.	1
F. Hertzberg, 53, New Broad Street, E.C.	1
D. J. Paterson, 53, New Broad Street, E.C.	1
A. Bates, 65, Dynevor Road, N.	1
R. Ostermeyer, 13 Australian Avenue, E.C.	1
E. A. C. Thomson, 11, Great St. Helens, E.C.	1
W. T. Lane, 15, Colenso Road, Clapton, N.E.	1

No initial public issue. The number of directors is to be not less than two nor more thon seven; the signatories are to appoint the first. Qualificatfon, one share. Registered office: 53, New Broad Street, E.C.

PATENTS.

Applications for Patents and Patent Applications recently published relating to the Petroleum Industry.

Specially contributed by Messrs. EDWARD EVANS *& Co., of 27, Chancery Lane, London, W.C., and 105, Colmore Row, Birmingham, Consulting Engineers, Chartered Patent Agents and Enrolled Patent Attorneys of the United States.*

Application Filed in Great Britain.

Improvements in and Relating to the Manufacture of Lubricating and Anti-Corrosive Oils.—Friedrich Wilhelm Klever, London. No. 27254 of 1904.

Applications Published in Great Britain.

Improvements in or Relating to Lamps for Burning Liquid Combustibles.—Louis Nissim, Southend-on-Sea, and George Butler Jones and Joseph Rogers Edwards, both of London. No. 1086 of 1905.

This relates to an extinguishing device for lamps, and consists in the arrangement wherein the extinguisher is so connected with the cap or the like, which is capable of tilting when the lamp is upset, that the extinguisher will be positively operated to put out the flame of the lamp, whilst it will be brought out of action automatically when the lamp is erected after having been upset, and will be held out of action so long as the lamp stands upright.

A Chimney Attachment for Lamps and Stoves Consuming Gas or Oil.—Percival Hugh Webber and Horace Lavy, both of West Hampstead, N.W. No. 9244 of 1905.

This relates to a chimney attachment for lamps and stoves consuming gas or oil, and consists of a strip of steel or other metal of a sectional width of about one-eighth of an inch in length, and an approximate thickness of one-eighteenth of an inch standard wire gauge bent or drawn to form a uniform "U" with legs two and a half inches, and about one-eighth of an inch apart. The device is slipped or placed over the edge of the glass chimney, globe or cylinder, with one leg of the "U" on the inside thereof, and the other leg outside, thereby the heat is conducted away with the object of saving fracture or breakage due to uneven expansion.

A Process for Eliminating the Odour of Fish Oil.—Alexander de Hemptinne, Belgium. No. 12525 of 1905.

This relates to a process for eliminating the odour of fish oil, which consists in subjecting the oil to the action of silent electric discharge in an atmosphere of hydrogen.

AMERICAN PATENTS GRANTED.

Oil Pump.—John B. Davis, Dayton, Ohio.

In an oil pump, a tank having in the bottom thereof a recess or compartment specially adapted to contain the pump, a pump at all times submerged in oil by reason of its occupying such compartment, such pump consisting of two cylinders lying horizontally within said compartment, each of said cylinders having an inlet and outlet valve occupying perpendicular positions, the said valves contained in a single pump cap which unites the ends of the cylinders, pistons moving in said cylinders, racks connected with said pistons, means for maintaining said racks in horizontal positions, a pinion engaging both racks, and an operating shaft extending vertically from said pinion and provided with means on the exterior of the tank for rotating said shaft to impart movement to the pump pistons.

Oil Tank.—Casper H. Henzel, Allegheny, Pa.

An oil tank comprising a main reservoir, having a plurality of compartments of different capacities, three-way faucets carried by the tank and in communication with the compartments, pipes establishing communication between the main reservoir of the tank, and said compartments, ventilating pipes for the aforesaid pipes, and revoluble dials mounted on the tank adjacent to each faucet, arms secured in slotted handles of said faucets, and spring-pressed levers carried by said arm adapted when the handles are turned in one direction to rotate the dials.

MOTOR NEWS.

The show which is to be held at Old Trafford, Manchester, early next month by the Manchester and District Cycle Trades' Association, Ltd., promises to be very successful. We understand that the promoters have secured the support of some of the most influential motor firms.

* * *

Among the new companies recently formed are the following:—The East Lancashire and Manchester Carrying Co., the Austin Motor Co., the Express Motor Bus Co, and the Dart Motor Bus Co.

* * *

Her Royal Highness Princess Henry of Battenburg has ordered a 30/40 h.p. motor carriage from the Daimler Co. Her Highness's example is being followed by the Duchess of Bedford.

* * *

Mr. Worby Beaumont, M.I.M.E., has been appointed technical adviser to the Commissioner of Police with regard to all technical questions dealing with motor cars and buses which come within the jurisdiction of the Commisioner's control.

* * *

The Daimler Motor Co. delivered the 45 h.p. carriage for His Majesty the King at Sandringham on Christmas Day.

* * *

At the Motor Exhibition recently held in Paris a motor funeral hearse was on show. The hearse is now in practical use in France. A motor hearse was also used in Reigate the other day. Sir A. Conan Doyle, who was one of the chief mourners, followed up the mournful procession in his motor car.

* * *

Keen competition is now running very high in Paris in respect to the comfort and elegance of motor cars. Messrs. De Dietrich are one of the many firms who have won a gold medal for the elegance of their cars which were on view at the Paris Salon.

* * *

We learn that the Birmingham Small Arms Co. has now decided to take up the manufacture of motor cars. Such a firm will no doubt meet with great success.

* * *

The A.C.G.B.I. will hold an examination next Wednesday week at the Club House. The object of the examination is to ensure the safety of driving and mechanical proficiency on the part of chaffeurs and mechanics.

MESSRS. MORDAUNT BROTHERS' LATEST CIRCULAR.

Messrs. Mordaunt Brothers' circular of Friday's date states as under:—Refined Petroleum Oil: In the interval since our report of the 16th ult. there has not been anything of special interest to notice. The grade demand has somewhat improved, but is still below the average of the season. The Syndicate has again slightly reduced prices, but as there is plenty of oil on the market outside, this fall has not made any difference. Forward delivery prices are easier; we quote January-April, American, 6⅝d.; Russian, 6d.

The arrivals are 711,000 gallons from Russia, 790,000 gallons from Austria, and 1,943,747 gallons from America.

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ending December 12th was 94,624 poods, or 1,526 tons.

Baku Russian Petroleum Co., Ltd.—The production for the week ending December 16th was 280,000 poods, or 4,516 tons.

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{5}{8}$-$\frac{3}{4}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	3/9-4/3
,, ,, ..	£650,000 $5\frac{1}{2}$% Pref.	£1	6/9-7/9
Californian Oilfields	£250,000 Ord.	£1	$6\frac{3}{4}$-$6\frac{7}{8}$
European Petroleum	£550,000 Pref.	£1	$\frac{3}{16}$-$\frac{5}{16}$
,, ,, ...	£550,000 Ord.	£1	1/0-2/0
,, ,, ...	£376,000 Deb.	£100	89-92xd.
Russian Pet. & Liquid Fuel ..	£500,000 $6\frac{1}{2}$% Pref.	£1	14/0-15/0
,, ,, ...	£600,000 Ord.	£1	14/6-15/6
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	$3\frac{3}{8}$-$3\frac{5}{8}$
,, ,, ...	£575,000 Ord.	£1	10/0-11/0
Shell Transport & Trading ..	£2,000,000	£1	22/3-23/3
,, ,, ,, ..	£1,000,000 Pref.	£10	$9\frac{1}{8}$-$9\frac{3}{8}$
Spies Petroleum Company ..	£312,500	10s.	6/6-7/6

SCOTCH COMPANIES.

Supplied by Messrs. MACLEAN AND HENDERSON, STIRLING.

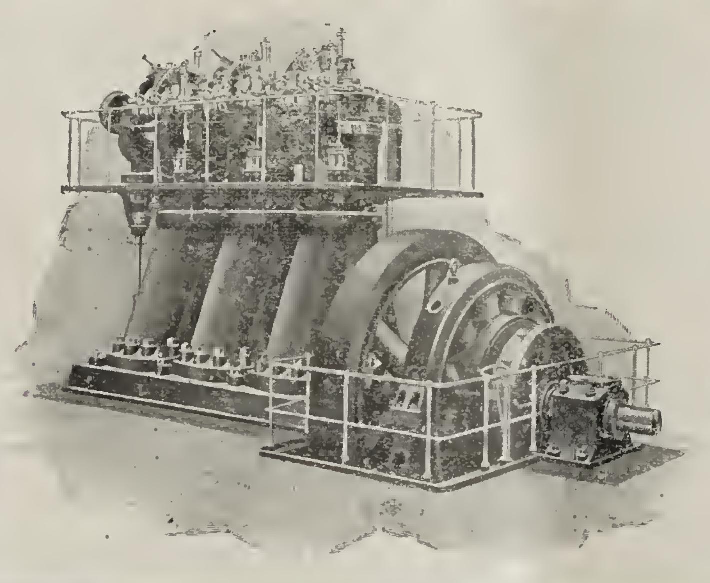
Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. $8\frac{1}{2}$ pd	£199,750	£10	$18\frac{1}{8}$
Do. 6% Cum. Pref. ..	£100,000	£10	$12\frac{1}{16}$
Burmah Oil, Ord.	£1,100,000	£1	57s. 9d.
Do. Pref.	£250 000	£1	25s. 0d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	$9\frac{1}{4}$
Do. 5% Pref. ..	£18,900	£7	$5\frac{1}{4}$
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	$17\frac{3}{4}$
Do. New (£8 10s. pd.)	£131,750	£10	$16\frac{1}{2}$
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	79s. 3d.
Do. 6% Cum. Pref.	£100,000	£10	$12\frac{3}{4}$
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	37s. 3d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	66s. 6d.
Do. "B" Deb...	£150,000	£100	150

RUSSIAN COMPANIES.

Company.	Nom. Value in Roubles.	Quotations on Dec. 28.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	403	408
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	3,575	3,650
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	--	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	170	173
Naptha Trading Co., Petrol.	250	—	—
Nobel Bros.	5,000	8,400	8,500
,, ,, ...	250	410	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

DUTCH COMPANIES.

Company.	Quotations Jan. 3rd.	Quotations Dec. 28th.	Florins.
Arnhemsche Petroleum Mij. ..	81	80	1,000
Dordtsche Petroleum Mij. (Pref.) ..	124	$127\frac{1}{2}$	500
,, ,, ,, (Deb. $4\frac{1}{2}$%)	$102\frac{3}{4}$	103	1,000
Elzasser Petroleum Mij.	44	44	1,000
Gaboes ,, ,, ...	$19\frac{3}{4}$	$19\frac{3}{4}$	—
Holl. Rumeensche Petroleum Mij...	$21\frac{5}{8}$	20	1,000
Int. Rum. Pet. Mij.	91	91	500
Java Petroleum Mij...	30	30	1,000
Koninklyke Nederl. Pet. Mij. Shares	$387\frac{1}{2}$	388	250-1,000
,, ,, Share certificates	$389\frac{1}{2}$	387	1,000
Mœara Enim Petroleum Mij. ..	105	106	100
,, ,, 1-1,000 Oblig. 5	$102\frac{1}{2}$	$102\frac{1}{2}$	250-1,000
"Moesi Ilir" Petroleum Mij. ..	$36\frac{1}{2}$	35	—
Nederl.-Rumeensche Petroleum Mij.	15	15	
Nieuwe Ned. Petroleum Mij. And...	$55\frac{1}{4}$	$55\frac{1}{2}$	1,000
Oliebronnen in Hannover Mij. ..	151	$153\frac{3}{4}$	—
Panolan Maatschappij Cert. ..	$350\frac{1}{2}$	$350\frac{1}{2}$	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	134	$133\frac{7}{8}$	1,000
,, ,, (Common) ..	$88\frac{1}{2}$	$87\frac{1}{2}$	—
Sumatra-Palembang Petroleum Mij	$59\frac{1}{2}$	$60\frac{1}{2}$	500



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The Petroleum Industrial & Technical Review, Ltd.

SATURDAY, JANUARY 6TH, 1905.

A YEAR'S IMPORTS INTO THE UNITED KINGDOM.

THE statistics of the past year's imports of petroleum and its products into the United Kingdom will come to many as a surprise, for they shew that, in spite of what we are now accustomed to hear as to the decline in the use of oil in this country, the imports have been the largest on record. The figures for the year 1904, as compared with those of 1903, shewed a steady advance in the importation of petroleum products to this country, and those for the past twelve months display almost a corresponding increase, which in round figures is 12,000,000 gallons. The exact figures may be taken as under:—

1903. In gallons.		1904. In gallons.		1905. In gallons.
282,000,000	..	294,800,000	..	306,000,000

The increase of the past year's imports over those of 1904, though, as we have said, approximately amounting to the same advance as the figures for 1904 over those of 1903, displays many important changes; we see how that, while one producing centre has declined in its exports to this country, another has increased her petroleum exports to the United Kingdom not only in the same ratio, but has availed itself of the opportunity offered, and thus brought about the above record imports.

Let us analyse the exports of the several countries, and notice the many changes which have been brought about, not necessarily during the past year alone. Some two years ago we directed attention to the alarming decrease which was taking place in the imports of

American oil to this country on the one hand, and the coming to the front of Russia as an exporting country on the other. At that time the trend of events was unmistakably in favour of Russia, which country was making rapid strides in the quantity of oil shipped to the United Kingdom. The intervening year saw a great change in this respect, for the opening up of several important American fields, whose production had to find a market outside the country, tended not a little to assist America to the position which she now claims—that of supplying this country with two-thirds of the petroleum products she desires. When we recollect that only a year ago she stood but a few million gallons ahead of Russia, we shall see how marked a change has overtaken the export trade from those respective countries. This, however, cannot be considered as anything but temporary—at all events in the case of Russia.

We have from week to week recorded the sad disasters which have for the time being almost entirely dislocated the whole of Russia's trade in petroleum, and therefore no good purpose would here be served by dwelling upon the matter, except to say that we are already seeing a great improvement in the operations in the Russian fields, and as the production is now rapidly reaching its normal level, it does not require a vast imagination to see Russia's exports of petroleum to this country reaching the figures at which they have for the past few years stood.

For the present, however, this country's imports of petroleum from Russia have reached a very low ebb indeed, and, as will be seen by reference to the diagrams upon the opposite page of this issue, when compared with those from America they have for the past year stood out in a very bad light. Whether we look at the Russian illuminating oil imports, at lubricating oil, or solar oils, the same consistent decrease is to be noted throughout—in all cases the exports from that country to the United Kingdom have fallen during the past year about fifty per cent., the deficiency in each case having been made up by America.

As time goes on, we see the effect for good upon the industry of the growing popularity of the motor car. A few years ago our imports of benzine were very small indeed, but each succeeding year they are increasing, until at the present time they constitute quite an important branch of our petroleum imports. During 1904, we imported about 12,000,000 gallons of motor spirit mainly from America and Sumatra, but during the past twelve months these figures have advanced by fifty per cent., in which advance both the aforementioned fields have equally participated.

A word should be said of our imports from Roumania For a number of years these have been steadily progressing, and as the field for the extended use of oil in this country opened out, the Roumanian product has increased in volume upon the English market. The trend of events, however, is now in another direction. The bulk of Roumania's petroleum exports find their way to France, and so, apart from a few cargoes of gas oil, that country's petroleum trade with the United Kingdom is reduced to almost infinitesimal proportions, her total imports last year being only about 5,000,000 gallons.

In respect of the other countries which export petroleum products to England, the past year has brought about little change. The tendency, is, however, in the direction of increasing shipments to this country, and, with the exceptions which we have before mentioned, it would appear that a most healthy tone characterises our petroleum import trade, which, yearly increasing in volume, is consequently constantly adding to its importance.

◆

LONDON OIL SHARE MARKET.

Friday, Jan. 5th.

With the advent of the New Year there has been much more movement than for some time past in connection with the Oil Share department of the London Stock Exchange, shares changing hands and being enquired for noticeably amongst the less prominent securities, such as Californian Oil Fields, European Debentures, and Bibi-Eybat Petroleum. Although the actual business transacted has not been of sufficient magnitude to materially affect quotations, the interest evinced augurs well for the future.

On Saturday last the list read as follows:—Anglo-Russian Oil $\frac{3}{32}$-$\frac{5}{32}$, Assam Oil $\frac{5}{8}$-$\frac{7}{8}$, Bibi-Eybat Petroleum $\frac{1}{2}$-$\frac{5}{8}$, Debentures 88-93, Baku Ordinary 3s. 6d. to 4s., Preference 7s. 3d. to 7s. 9d., Californian Oilfields $6\frac{5}{8}$-$6\frac{7}{8}$, European Petroleum $\frac{3}{16}$-$\frac{5}{16}$, Russian Ordinary 13s. to 14s., Preferences 14s. 6d. to 15s. 6d., Schibaieff Ordinary 9s. 6d. to 10s. 6d., Preference $3\frac{3}{8}$-$3\frac{5}{8}$, Shell Transport 22s. 3d. to 22s. 9d. x.d., Preference 9-$9\frac{1}{2}$, Spies $\frac{5}{16}$-$\frac{3}{8}$.

Monday was a Stock Exchange holiday, but on Tuesday Bibi-Eybats were dealt in at 10s. 6d. and 10s. 9d., and European Debentures were also mentioned, while Russian Ordinary was a very strong market, finishing 1s. 6d. up on the day at 14s. 6d. to 15s. 6d.

On Wednesday Californian Oilfields were largely bought, the price on balance gaining $\frac{1}{8}$ at $6\frac{3}{4}$-$6\frac{7}{8}$; but some Bibi-Eybats were on offer, and Russian Debentures receded to 88-91.

On Thursday, the market kept very firm, but the only business of any importance was in European Debentures.

To-day's quotations are given in full on page 8.

◆

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 4th January, 1906, as follows:—

Business has been quiet in the past week, but prices are firmer, and we make oil sizes to-day, as below according to time of delivery:—

IC	$18\frac{3}{4} \times 14$	124 sheets	110 lbs.	13/3 to 13/4½ per box.
IC	$19\frac{1}{4} \times 14$	120 ,,	110 ,,	13/3 to 13/4½ ,,
IC	20×10	225 ,,	156 ,,	18/6 to 18/9 ,,

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EXPORTS OF PETROLEUM FROM AUSTRIA-HUNGARY.

The exports of petroleum products from Austria Hungary in October amounted to the substantial figure of 25,735 tons, against 10,485 tons in October, 1904.

The exports for the first ten months of the year, compared with the corresponding period of 1904, were :—

	Ten Months, 1905.	Ten Months, 1904.
Illuminating oil	125,815	63,641
Lubricating oil	28,283	22,318
Benzine	7,047	11,843
Crude oil	888	2,055

The value of the exports during the ten months of 1905 amounted to 13,300,000 kronen, against 8,820,000 kronen in the ten months of 1904.

The exports to different countries were as under :—

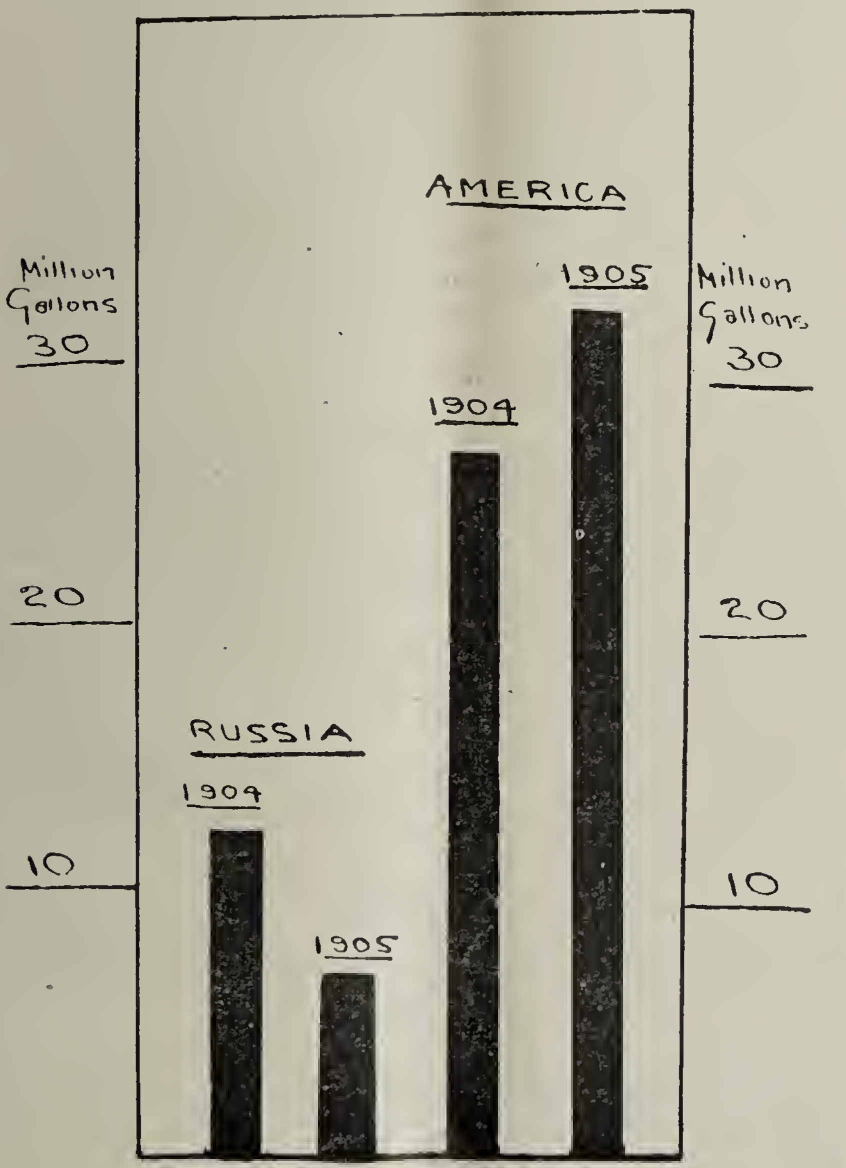
	Tons
Germany	47,601
France	23,965
Turkey	23,928
Switzerland	10,908
England	7,987
Italy	4,225
Other countries	42,525

Tha tanker "Kura" is about to take a second cargo of Austrian oil to England. Arrangements are also being completed for exporting considerable quantities of Galician oils *via* Germany.

◆

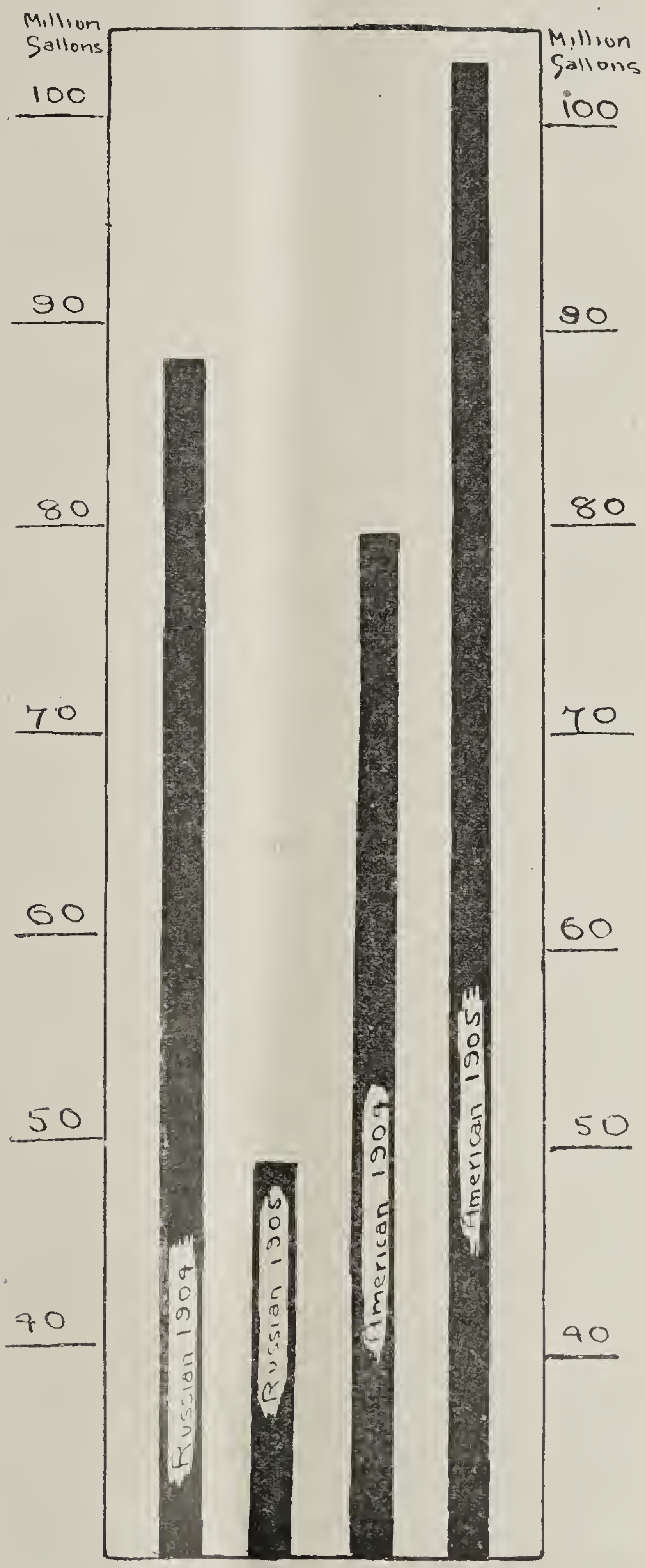
WHERE ENGLAND'S LUBRICATING OIL COMES FROM.

The diagram here given shews to what an enormous extent the disorganisation in Russia has affected that country's exports of lubricating oil to the United Kingdom. In commenting upon the matter, a Trans-atlantic contemporary very aptly remarks: "It's an ill wind," etc. :—



THE IMPORTS OF ILLUMINATING OIL INTO THE UNITED KINGDOM.

The specially-prepared diagram here given of the imports of illuminating oil into the United Kingdom during the past two years, clearly bears out the statements made in our leader of the great change that has overtaken Russia's exports of illuminating oil to this country of late. It will be seen that for the year 1904, Russia sent considerably more illuminating oil to England than did America, but for the past year, while Russia's exports of illuminating oil to this country have fallen almost one half, those from the United States have considerably increased, with the result that last year we received more than double as much lamp oil from America as from the Caucasus.



THE CONDITION OF THE PETROLEUM INDUSTRY IN FERGHANA,

LATEST DETAILS.

(Concluded from page 528.)

The locality where the oil field is situated is abundantly supplied with water. There are wells with a sufficient supply of drinking water. For the boilers which consume large quantities of water the latter is supplied from the irrigation works, the right for which is obtained from the possession of a corresponding area of land requiring irrigation. The company was therefore compelled to buy an additional quantity of land from neighbouring owners. A little distance away from the oil field at the foot of the hills the coal owners have their own small coal pits, which yield a coal, although of inferior quality, but nevertheless quite suitable for many purposes, as it is very cheap, costing only seven copecs per pood delivered at the wells.

Early in August certain indications were found of the existence of a second oil deposit running parallel with the first. On the banks of a small river running through the company's lands a thin covering of oil was found on the water; when digging was tried at this spot a flow of oil was discovered. At certain spots small holes were found resembling the holes produced by sticking of a rod, from which at times appear water, and at times water and oil or pure oil. At this part of the river bank a pit has been dug, which by the 19th of August was full. The oil out of this pit was made use of for the operations.

Having equipped the oil field and laid a pipe line, Mr. Kovalevski found himself in a position to propose to the railway, who had formerly declined terms which were very beneficial to them, fresh terms even more advantageous to the company. On the 1st of May, 1905, he entered into an agreement with the committee charged wfth the construction of the southern section of the Orenburg-Tashkent Railway on the following terms: The company undertakes to supply to the railway 1,000,000 poods of crude oil at 25 copecs, delivered at Vannovskaia station. Thus the cost to the Orenburg-Tashkent Railway of a pood of oil delivered at Tashkent, in their own tank waggons, including the freight from Vannovskaia Tashkent of 5·7 copecs per pood, is 30·7 copecs. The southern section of the Orenburg-Tashkent Railway may become a large consumer of Ferghana oil, taking upwards of 3,000,000 poods for each winter season. Ferghana oil will probably also be used by the Central Asian Railway, as on the Andijan-Tcherniaevo section, and may be also on parts of other sections, it would be more advantageous to use Tchimion oil than Baku oil. Some industrial works in the district have already commenced to use fuel oil, but their total consumption does not promise to be very large. A million poods of crude oil per annum is about all that they can be expected to take up.

The success of the Ferghana Petroleum Co. has induced another enterprise, the "Rishtan" Co., to file claims for concessions, situated on the same zone as the Tchimion lands, and to start boring. Up to the time of writing, however, the boring had not yielded any positive results, and the rise in price of the shares of the "Rishtan" Co. could only be attributed to the oil boom which has been created at Kokand by the reports of the successful results achieved by the Ferghana Co. The bazaar at Kokand became a veritable oil share exchange, where the "Rishtan" Company's shares (which are really worth nothing as yet, as the company is yielding no revenue, and has not yet even properly commenced operations) have been sold at 400 roubles each, against their nominal value of 100 roubles.

An attempt was made to form a third company for operations in the same district, but this, however, failed.

Of somewhat more importance seem to be the attempts to develop a petroleum field in the locality of Silroco at a distance of about six miles from Melnikovo station on the Central Asian Railway, in the vicinity of the village of Kannibadam. The local department of the Ministry of Agriculture and State Domains has already received applications for concessions of petroliferous lands in this locality.

As regards the Government lands at Maili-Sai, at a certain time it was proposed to start working there, but so far these lands remain undeveloped, mainly owing to the want of good roads.

◆

PETROLEUM STORAGE INSTALLATIONS AT ROTTERDAM.

We take the following particulars regarding the petroleum storage installations now in existence in Rotterdam from the *Journal du Petrole*, from which it will be observed that the port is in this respect one of the best equipped in Europe.

There is the St. Janskade (St. John's Wharf), having a length of 850 metres, and a depth of from six to seven metres. This wharf is leased by three petroleum companies — the Deutsche-Amerikanische Petroleum Gesellschaft, the Pakhuismeesteren Co., and the American Petroleum Co. There are wooden jetties and moorings for ships.

At the Kortewoordschekade (Koortewoord Wharf), having a length of 320 metres and a depth of 7½ metres, there are the installations of the Deutsch Russische Naphta Import Gesellschaft and of the Royal Dutch Petroleum Co., the former is used for illuminating oil and the latter for petroleum spirit.

There is also the Petroleumhaven, having a length of 165 metres, a width of 70 metres, and a depth of 3·16 metres, and the St. Janshaven, with a length of 125 metres, a width of 60 metres, and depth of 3 metres. The last named wharf is surrounded by the installations of the Deutsch-Amerikanische Petroleum Gesellschaft.

◆

The Imports of light petroleum oils into Milan in 1904 amounted to 1,195 tons, of which 444 tons came from Austria-Hungary, 18 tons from France, 31 from Germany, 9 from England, 29 from Switzerland, and 664 tons from other countries.

OUR. . . . . AMERICAN LETTER . .

From Our . . Own . . . . Correspondent.

Pittsburg, *December 21st*, 1905.

The year drawing to a close has been the least fruitful, in the way of finding new producing territory, of any for more than a decade. For the greater part of the year the market has been low, and operators declined to shew any great energy in searching for new pools. When the market advanced the favourable season had gone by for active operations. It is not contended, however, that any amount of activity could have brought better results than the discovery of small pools. With the amount of development work that has been done in the past year, there does not seem to be any hope of finding anything better than small pools. The territory has been so generally tested that there is no longer room for the development of large fields.

Notwithstanding many wells are completed each week, it is not the exception when one starts at 100 or more barrels a day. If by chance one has an initial production so high, it is a matter of a few days till it declines to an ordinary producer. The reason is that they have but a small area to drawn from, and the decline must necessarily be very rapid. In the whole producing area of the lower South-west and South-eastern Ohio the entire number of wells with an individual production of 100 or more borrels a day does not exceed a half dozen.

The only well drilled in the deep territory that started at better than 100 barrels during the past few days was Judge Goff's No. 63, located on Big Camp run, in Sardis district, Harrison county. This well was credited with 175 barrels the first 24 hours. On Big Camp Run is a considerable body of territory that had not been previously developed, and it will no doubt furnish a number of good producers and considerable new production. The territory in that locality has been under lease for some time, and their will be no immediate rush to that section. Judge Goff and the South Penn Oil Co. are the largest leaseholders in that section. No other part of Harrison county holds any encouragement to operators. It is all deep sand drilling, and the expense of developing that territory is very great.

The Wick district in Tyler county and the Yellow Creek district in Calhoun county are still in the lead in active operations. In the last named the promised south-west extension is not coming up to what was confidently expected of it when the good producers were drilled in on the Silcott and McConaughy farms. Three dusters have just been encountered in what looked like locations that would certainly present producers of good size. Two of the wells completed shew that all of the intervening territory between the old and new sections is not possessed of the regularity that characterised the old field, where very few dusters were encountered. Outside of the extension there is now very little wildcatting in Calhoun county.

In Roane county there is some new work under way and starting, but there is a double incentive for this work. A number of gas companies are looking for a supply of gas in that quarter.

In Putnam county in Curry district, native talent is still hopeful of finding a pool of oil in the salt sand or the Berea grit. Nothing of an encouraging nature has been discovered except gas in the salt sand.

Pleasants county has had more work of a semi-wildcat nature during the past two months than any of the shallow sand districts. Despite the fact that many test wells have been completed in the search for extensions to the old pools and the hope of finding new, nothing of a promising nature has been the reward. In the vicinity of St. Marys a good many wells have been completed, and some very fair producers have been found in the lower formations.

South-eastern Ohio operators have been busy for some months trying to locate new pools, but have not made much progress in that direction. The Berea grit development east of Woodsfield, in Monroe county, is the only new district that is increasing its production. In this territory operators have been very fortunate. In the past year much of this territory had been tested, but the wells drilled stopped in the Keener or Big Injun, and not until the lower sand formation was drilled into was territory found to be the most valuable now under development. The Berea grit formation is about 28 feet in thickness, and contains three pay streaks. The pool promises to be the most profitable discovery of the year on the Ohio side. One company has completed 18 wells, and has a production of more than 700 barrels a day, and has enough drillable territory in sight to bring its production up to more than 1,000 barrels a day.

In the shallow sand districts in Washington county there has been a falling off in development work. The average size of the wells is small, and many dusters are encountered. There does not seem to be room for any large pools for the reason that the country has been pretty thoroughly tested.

Harrison county has some test work starting and under way. South of the Adams pool the best producers are found, but the limits of this development have been defined. Should the test wells now drilling in advance come in dusters, future operations will be confined to the development of the interior portions of the pool.

In the Burning Springs district, Wirt county, there is quite a good showing of new work starting. This is one of the few districts that can be operated profitably on account of the light expense of drilling and operating the wells after completion.

While operators are not concentrating their efforts in any particular locality, there is considerable work of an experimental nature scattered throughout the lower South-west and South-eastern Ohio fields. Much of this work has been started without any regard for previous developments, and with a view to discovering an entirely new pool. A part of the work lies in the vicinity of some of the old developments, and those backing it are figuring on finding extensions to the previous producing limits. Much of the success attained during the past month has been of that character.

On Point Pleasant creek, Tyler county, there is a little new work starting in the vicinity of the good producer completed recently by the Melrose Oil and Gas Co. on the J. U. Leazure farm. The same company has made the location for a test on the Jacob Williams farm, adjoining the Leazure, and has the rig completed for a second test on the last-named farm. The same company has made the location for a test on the John Harris farm, and the Tyler Oil Co. has started to drill on the S. E. Swiger farm.

The various gas companies that now rely on West Virginia for their main supply of gas are not letting up in field work, and the success they have been having would indicate that all will have an ample supply to meet all demands for the winter's consumption.

◆

LATEST DEVELOPMENTS IN THE HUMBLE OIL FIELD.

THE PRODUCING TERRITORY EXTENDED.

Following upon the remarks which we made last week in the Review, the latest details from Humble, Texas, are very interesting, shewing, as they do, that an extension of the producing territory has been made about three quarters of a mile to the north and east. It appears thar during November tests were started in the territory, but not until a few days ago was it generally known that a productive sand had been developed.

One of the new wells, says a writer in the current issue of the *Oil Investors' Journal*, was completed a month ago, but Mr. Sharp shut it down until he got hold of every acre of land obtainable in the district lying north and east of the Cherry tract and the San Jacinto River. He succeeded in keeping secret the fact that he had found a paying sand until he had concluded many important land deals, and thus repeated the *coup* he made at Sour Lake in 1903, when he developed a gusher sand in a test well, but did not allow the fact to become public property until almost four months later.

The new production that will result from the development of the northern extension will not affect the market, unless wells of great capacity are brought in. Still, there is just a hope that gusher territory is tapped, and then we may expect a repetition of events that occurred at Humble a year ago.

AMERICAN PETROLEUM EXPORTS.

STATISTICS FOR NOVEMBER.

According to the official publication of the Washington Bureau of Statistics, the exports of petroleum from America from the various ports during November were as under:—

	1904. Quantities. Gallons.		1905. Quantities. Gallons.
Crude—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	4,985,513		6,499,914
New York	—		—
Philadelphia	1,515,339		270,000
Galveston	1,213,139		4,620
Total	7,713,991	Total	6,774,534
Total value for the month, 1904			$483,026
,, ,, ,, 1905			$357,637
Naphthas—			
Baltimore	—		—
Boston and Charlestown	—		246
Delaware	514 628		—
New York	538,050		719,720
Philadelphia	342,441		965,011
Galveston	—		—
Total	881,005	Total	1,684,977
Total value for the month, 1904			$86,746
,, ,, ,, 1905			$157,328
Illuminating—			
Baltimore	4,214,702		3,867,676
Boston and Charlestown	40,549		100,726
Delaware	—		—
New York	34,616,830		29,352,684
Philadelphia	26,700,935		20,481,335
Galveston	—		2,462,061
Total	65,573,016	Total	56,264,481
Total value for the month, 1904			$4,633,108
,, ,, ,, 1905			$3,765,359
Lubricating and Paraffin—			
Baltimore	270,102		0 88,677
Boston and Charlestown	8,482		5,419
Delaware	—		—
New York	6,215,848		6,970,744
Philadelphia	2,435,258		2,589,805
Galveston	3 164		110
Total	8,932,854	Total	9,954,855
Total value for the month, 1904			$1,231,677
,, ,, ,, 1905			$1,270,575
Residuum—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	—		—
New York	980,400		900,500
Philadelphia	4,711,064		6,684,830
Galveston	—		200
Total	5,601,464	Total	7,585,430
Total value for the month, 1904			$179,510
,, ,, ,, 1905			$219,902
Total Mineral Oils—			
Baltimore	4,484,804		4,256,352
Boston and Charlestown	49,031		106,491
Delaware	4,986,029		6,499,914
New York	42,261,128		37,943,648
Philadelphia	35,705,037		40,990,981
Galveston	1,216,305		2,416,991
Total	88,702,330	Total	82,264,377
Total value for the month, 1904			$6,564,067
,, ,, ,, 1905			$5,770,801

◆

SWISS IMPORT DUTIES.

From last Monday the import duties on petroleum oils entering Switzerland were modified as under:—

	Old Tariff from 1892. Francs.	New Tariff. Francs.
Benzine	1·00	0·30
Gasolene	1·25	1·25
Illuminating Oil, Naphtha, Neoline	1·15	1·25

The American Oil Market.

New York, Week ended Dec. 23rd.

The reports from the older producing fields received during the past week indicate a slackening off of the activity in development operations, doubtless due to the unfavourable results of the past few weeks. Fewer new wells were completed during the past week, and nearly all of those shewing oil were small pumpers, while the percentage of failures to find oil was larger than it has been in a long time. Operators are becoming discouraged, although considerable work of an experimental nature is under way in an endeavour to establish extensions. There is also some work under way in sections more or less remote from known productive areas, says the *Oil, Paint and Drug Reporter*, the hope being that a new pool may be discovered; and this class of work accounts for the increase in dry holes, as efforts in this direction have almost uniformly proved failures. The average of the producing wells brought in during the past week is very low. A few good producers were reported in Ohio, but the number of failures to find oil in that State has also been larger. It is apparent that the total production in the Northern fields is decreasing steadily, but as conditions are not favourable to an advance in price, the foreign markets declining and the export demand shewing a large falling off, the producers see little prospect for profitable undertakings. In the Kansas and Territories fields development work continues, and the lot of the drillers is brightening, new refineries and pipe lines being projected, which will greatly relieve the situation. In Texas the production now averages about 77,000 barrels a day. Considerable new work is reported in the Humble field, where extensions have been established. The latest quotations for Texas oil are:—Batson, 32 @ 35c., as to gravity; Humble, 34 @ 38c.; Saratoga, 34 @ 35c.; Sour Lake, 32 @ 44c., as to gravity; Spindle Top, 45c.

Refined and Products.—The demand for refined for export has shewn considerable increase during the past week, a larger proportion of the tank fleet having been on this side, the engagements amounting to about 250,000 barrels, all for shipment in bulk. There is little change in the situation abroad beyond a steady weakening of prices, which is attributed to the sharper competition on the part of Roumanian refiners. The situation in Russia has not improved, the reports by cable shewing conditions going from bad to worse. The agents of the English companies operating at Baku, however, report satisfactory progress in rebuilding.

The price for barreled oil has remained steady at 7·60 for New York loading, and at 7·55c. for Philadelphia loading. The principal foreign markets are easier. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. 0d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export have been in light request, and sales of about 125,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in fair request, and sales of about 50,000 barrels are reported. Pennsylvania crude is quoted at 7·60c. in barrels.

Crude naphtha continues steady. For export, sales of about 5,000 barrels have been reported.

CLOSING QUOTATIONS.

Crude.		Week ended Dec. 16. 1905	Dec. 23. 1905.
National Tran, Certificates	per bbl.	$1·53@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk		4·70	4·70
Residuum, bbls for export		6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were:—

	Week ended Dec. 23. 1904.	Dec. 23. 1905.
Tiona	1·70	1·68
Pennsylvania	1·55	1·58
North Lima	1·04	0·94
South Lima	0·99	0·89
Indiana	0·99	0·89
Canadian Oil:		
Petrolia	1·53	1.34

Refined—For Export.

		Week ended Dec. 16.	Dec. 23.
Cargo Lots for export	per gal.	7·60	7·60
In bulk		4·70	4·70
Philadelphia loading		7·55	7·55

Refined in Cases—110 Fire Test.

	Week ending Dec. 16.	Dec. 23.
5,000 to 10,000	10·35	10·35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended Dec. 16.	Dec. 23.
120 fire test, S.W.	per gal.	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ending Dec. 16.	Dec. 23.
Naphtha, crude, car. lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg	17	17

Pennsylvania Oil Runs from Dec. 15th to Dec. 20th were:—Dec 15th, 76,477; Dec. 16th and 17th, 123,863; Dec. 18th, 44,130; Dec. 19th, 58,731; Dec. 20th, 61,342. For the month of Nov., 2,169,468.

The Deliveries of Pennsylvania Oil for the same dates were:—90,355; 109,783; 57,980; 63,112; 71,425; For the month of Nov., 2,616,001.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended Dec. 22 and from Jan. 1, were as follows:—

	Week.	Year.	1904.
Refined, barrels and bulk	249,600	12,053,800	10,521,400
Refined, cases	125,000	19,444,000	16,771,000
Crude, barrels and bulk	46,900	2,328,500	1,232,000
Crude, cases	23,000	288,000	301,000
Naphtha, barrels	—	531,700	295,900
Residuum, barrels	300	784,300	456,200
Lubricating, barrels	1,300	243,100	118,000
Total, barrels cde. eq.	497,183	25,977,751	22,593,904

Clearances for the Week.

During the week ended Dec. 22nd, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1904.
Refined	12,278,610	487,583,421	426,697,713
Crude	153,780	1,085,574	743,181
Naphtha	35,420	11,943,715	8,691,905
Residuum	—	3,294,515	9,993,528

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Dec. 22nd	16,525,260
Total from New York, from Jan. 1, 1905	651,796,805
Same period last year	569,189,273
Increase	82,607,532
From United States, week ended Dec. 22nd	23,938,705
Total from United States, since Jan. 1, 1905	1,223,257,354
Same period last year	1,073,706,596
ncrease	149,550,758

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The "Review" Shipping List.

JAN. 4, 1906.

Specially Prepared for this Journal.

NOTE.—Except when otherwise stated the Vessels are Steamers.

(*The following abbreviations are used in this table:*—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Philadelphia	Sables d'Olonne	P. Del. Break., Dec. 17
ALCHYMIST	Havre	Salzaete	At Terneuse, Jan. 1
AMERICAN	Antwerp	New York	P. Prawle Pt., Dec. 24
APPALACHEE	Shanghai	SanFrancisco	Arr. Dec. 15
APSCHERON	Antwerp	Rouen	Arr. Dec. 26
ARAL	Tyne	Philadelphia	Arr. Dec. 21
ARAS	Manchester	Newport	Arr. Dec. 24
ARGYLL	SanFrancisco	Honolulu	Arr. Nov. 26
ASTRAKHAN	Tyne	Philadelphia	Arr. Dec. 22
AUGUST KORFF	New York	Hamburg	Arr. Dec. 31
AUREOLE	Manchester	Penarth	Arr. Dec. 27
BAKU STANDARD	Rouen	Batoum	L. Algiers, Dec. 20
BALAKANI	Eastham	Port Arthur (Texas)	L. Queenstown, Dec. 29
BATOUM	Tyne	Philadelphia	P. Dunnet Head, Dec. 25
BAYONNE	New York	Malta and Venice	P. Gibraltar, Jan. 3
BEACON LIGHT	Penarth	Del. Break.	L. Dec. 22
BEME	Bombay	Rangoon	L. Dec. 7
BLOOMFIELD	Blyth	Philadelphia	Arr. Dec. 27
BORJOM	Batoum	Odessa	L. Sept. 18
BRILLIANT	New York	Swinemunde	P. Butt of Lewis, Jan. 3
BROADMAYNE	London	Philadelphia	P. Dunnet Hd., Dec. 24
BULLMOUTH	Yokohama	—	L. Palembang, Dec. 19
BULYSSES	Kustendje	Dover	L. Const'ple, Dec. 29
BURGERMEISTER PETERSEN	Philadelphia	London	L. Dec. 22
CADAGUA	—	—	In port, Bilbao, Dec. 26
CALCUTTA (Br. bq.)	Newcastle (N.S.W)	SanFrancisco	L. Dec. 4
CARDIUM	Yokohama		L. Dec. 20
CAUCASIAN	Batoum	London	Cl. Const'iple, Dec. 23
CHARLOIS	Philadelphia	Antwerp	P. Reedy Island, Dec. 20
CHESAPEAKE	Manchester	New York	Put back Jan. 2
CHESTER	Antwerp	New York	P. Prawle Pt., Dec. 31
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Singapore	—	L. Dec. 26
COL. E. L. DRAKE	New York	Galveston	L. Oct. 25
COWRIE	Philadelphia	Dunkirk	Arr. Jan. 2
CYMBELINE	London	Port Talbot	Arr. Dec. 20
CZAR NICOLAI II.	Hamburg	Batoum	P. Dardanelles, Dec. 29
DAGHESTAN	Antwerp	Philadelphia	P. Lizard, Dec. 20
DAKOTAH	SanFrancisco	Shanghai	L. Nov. 24
DELAWARE	Dublin	Cardiff	Arr. Nov. 20
DEUTSCHLAND	New York	Hamburg	In port, Dec. 24
DIAMANT	Copenhagen	Philadelphia	P. Dunnet Head, Dec. 20
ELAX	Calcutta	—	L. Dec. 31
ELISE MARIE	Philadelphia	London	L. Dec. 23
ENERGIE	Tyne	Philadelphia	L. Dec. 26
ERIVAN	Port Arthur (Texas)	Antwerp	In port, Dec. 28
EUPLECTELA	Hamburg	New York	P. Scilly, Dec. 22
EXCELSIOR	Philadelphia	Dublin	L. Dec. 28
EZIO	—	—	Coasting Peru
FRANCE MARIE	Marcus Hook	Barcelona	Arr. Dec. 6
GEESTEMUNDE	Hamburg	Philadelphia	P. Dunnet Head, Dec. 19
GENESSE	Manchester	Philadelphia	L. Liverpool, Jan. 3
GEORGIAN PRINCE	Rouen	Philadelphia	In Tyne, Dec. 6
GOLDMOUTH	Soesoe	—	L. Dec. 21
GRAFSTROGANOF	Cronstadt	Libau and Odessa	At Libau, Nov. 25
GUT HEIL	Pillau	Baltimore	P. Dover, Dec. 28
HAINAUT (Dch. shp.)	Antwerp	Alexandria	P. Beachy Head, Dec. 21
HARRY WADSWORTH	Middlesbro'	Port Arthur	P. Dungeness, Dec. 21
HELIOS	Trebizond	Constant'ple	Arr. Dec. 28
HOTHAM NEWTON	Ellesmere	Port Arthur (Texas)	Arr. Dec. 18
HOUSATONIC	Bombay	Newcastle	L. Dec. 16
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Ibrail	Barcelona	Arr. Dec. 23
J.B. AUG. KESSLER	Sumatra	New York	Arr. Dec. 31
JAMES BRAND	Bordeaux	Tyne	Arr. Dec. 31
KURA	Tyne	Trieste	P. Dover, Jan. 1
LA CAMPINE	Antwerp	New York	Arr. Dec. 20
LA FLANDRE	Tyne	Philadelphia	P. Scilly, Dec. 22
LA HESBAYE	Antwerp	Philadelphia	P. Scilly, Dec. 17
LA MADALEINE	Antwerp	Cardiff	L. Dec. 29
LA VIGUESA	Marcus Hook	Vigo	L. Nov. 6
LACKAWANNA	Tyne	New York	P. Dunnet Head, Dec. 25
LE COQ	Philadelphia	Cette	L. Dec. 20
LOUTSCH	Barcelona	Novorossisk	L. Const'n'ple, Sept. 5
LUCERNA	Batoum	Manchester	Arr. Dec. 20
LUCIFER	Rouen	Newport	Arr. Dec. 1
LUCIGEN	—	—	In port, Avonmouth, Jan. 3
LUCILINE	Rouen	Kustendje	L. Const'ple, Dec. 28
LUMEN	Philadelphia	Bergen	P. Butt of Lewis, Jan. 3
LUX	Novorossisk	Blaye	Arr. Dec. 18
MAKKAVEI	Batoum	Odessa	L. Nov. 13
MANHATTAN	Antwerp	New Orleans	P. Barry Island, Dec. 19
MANNHEIM	Philadelphia	Copenhagen	L. Dec. 19
MARGARETHA	Leghorn	Batoum	L. Consti'ple, Dec. 24
MEXICAN PRINCE	Rouen	Tyne	Arr. Dec. 1
MIRA	Manchester	Philadelphia	L. Liverpool, Jan. 2
MUREX	Palembang	Samboe	Arr. Dec. 29
NARRAGANSETT	New York	London	P. Lizard, Jan. 3
NERITE	BalekPappan	—	L. Dec. 27
NEW YORK	New York	Rotterdam	L. Dec. 22
OCEAN	Philadelphia	Amsterdam	P. Del. Break, Dec. 20
ORANJE PRINCE	Vallo	Tyne	Arr. Dec. 31
ORIFLAMME	Cette	Marseilles	Arr. Dec. 13
OSCEOLA	Savannah	Hamburg	Arr. Jan. 2
OTTAWA	Galveston	Tampico	Arr. Dec. 17
OURAL	Tyne	Philadelphia	P. Beachy Head, Dec. 25
PALEMBANG	Batavia	—	L. Oct. 4
PAULA	Danzig	Philadelphia	In Tyne, Jan. 3
PECTAN	Emden	New Orleans	Arr. Dec. 12
PENNOIL	Philadelphia	Dover	At St. Michael's, Jan. 2
PERLAK	Shanghai	Hankow	L. Nov. 28
PETROLEUM	—	Gibraltar	Arr. Dec. 18
PHOEBUS	New York	Hamburg	P. Lizard, Jan. 3
PINNA	Manchester	Philadelphia	L. Liverpool, Jan. 1
POTOMAC	Philadelphia	Liverpool	P. Del. Break., Dec. 22

Vessel.	From.	For.	Latest Date and Position.
PROMETHEUS....	Clyde	Adelaide and Brisbane	At Sydney, Dec. 27
PRUDENTIA......	Sulina	Rouen......	L. Constanti'ple, Dec. 28
RION..............	Penarth	Novorossisk	P. Gibraltar, Dec. 26
ROCK LIGHT	Rotterdam..	Port Arthur (Texas)	P. Beachy Head, Dec. 22
ROSSIJA	Hamburg ..	Novorossisk	P. Malta, Dec. 29
ROTTERDAM	New York ..	Rotterdam..	Arr. Dec. 31
RUSSIAN PRINCE	Liverpool ..	Havana	L. Dec. 27
SALAHADJI	Singapore ..	Sanga Sanga	L. Sept. 10
SEMINOLE........	Philadelphia	Calcutta	L. Dec. 19
SILVERLIP	Port Arthur (Texas)	Dover	P. Sand Key, Dec. 21
SINGU	Madras	Rangoon ..	L. Dec. 4
SNOWFLAKE	Philadelphia	Southampton	L. Dec. 23
SOPHIE	Novorossisk	Trieste	Cl. Constant'ple, Dec. 25
SPONDILUS	Singapore ..	—	L. Nov. 27
STANDARD	Philadelphia	Stettin......	Arr. Dec. 24
STROMBUS	Tyne	Singapore ..	L. Suez, Dec. 12
SURAM	Penarth	Batoum	P. Gibraltar, Dec. 29
SUWANEE	Hull........	Philadelphia	P. Dunnet Hd., Dec. 24
SVIET	Alexandria..	Odessa	Arr. Dec. 17
TELENA	Cardiff	Singapore ..	P. Oitavos, Dec. 27
TEREK............	Savona	Philadelphia	L. Dec. 23
TIFLIS............	Philadelphia	Hamburg ..	Arr. Dec. 29
TIOGA	Batoum	Liverpool ..	Arr. Nov. 25
TONAWANDA	Manchester	New York ..	L. Jan. 3
TROCAS	Singapore ..	—	L. Dec. 23
TURBO	London	Port Arthur (Texas)	Off I. of W., Jan. 3
TUSCARORA......	Calcutta	Boston	At Suez, Jan. 2
TWINGONE	Calcutta	Rangoon....	L. Dec. 12
VEDRA............	Philadelphia	Venice......	P. Del. Break, Dec. 20
VILLE DE DOUAI	Kustendje ..	Calais......	P. Gibraltar, Jan. 2
VOLUTE	Balek Pappan	—	L. Dec. 22
WEEHAWKEN....	London	Sumatra	In Downs, Dec 30
WILLKOMMEN ..	Hamburg ..	Philadelphia	Arr. New York, Dec. 24
WINNEBAGO (Late KINSMAN)	San Francisco	Shanghai ..	Arr. Jan. 3

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

January 5th, 1906.

Petroleum prices have been reduced ⅛d. since our last report, and are now quoted as follows: –

Russian, 6⅛d.; American, 6¾d.; Water White, 8⅛d., Roumanian, 6⅛d.

LUBRICATING OILS.

There are no alterations in price to report, the following are the latest quotations:—

American pale, £7 5s. to £8 15s.
American dark cylinder, from £7 10s.
American filtered cylinder, from £10 12s. 6d.
Shellene, £5.

TURPENTINE.

Turpentine is easier, and is now quoted for Spot and to the end of April 47s. 6d.

LIVERPOOL OIL MARKET

January 5th.

Refined oils are very quiet, but sellers now quote 6¾d. for Russian and 7½d. to 8¾d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, January 4th.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, January 4th.

Standard White is quoted at 7·55.

RUSSIA.

Baku, December 5th (o.s.)

The price of crude oil at Baku is now 20½ copecs, but there is very little business doing.

BELGIUM.

Antwerp, December 27th.

The petroleum market is very firm. Price of Standard White, spot, 19½ francs per 100 kilos; January, 19¾ francs; January-March 20 francs.

GERMANY.

Hamburg, December 30th.

The petroleum market is very firm. Price of American Standard White remains at 7·50 marks per 50 kilos.

ROUMANIA.

December 30th.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs. ...	3·35-3·40
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery ...	3·00- —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural...	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octroi tax of 12 fcs. per 100 kilos

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
,, sp. gr. 0·720-0·725	8·00- 9·00
,, sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

Bombay, December 16th.

There has been a decline in prices of Burma oils, otherwise market is steady.

American, "Snowflake," 150 deg.	Rs.	6	0	2
,, Chester, 125 deg.		4	8	2
,, Monkey Brand, 125 deg.		4	2	2
Russian, "Anchor," 125 deg.		4	14	6
,, "White Camelia" brand, 125 deg. ..		4	0	2
,, "Rising Sun," bulk, in local made tins ..		3	14	0
,, "Elephant" brand, in local made tins ..		3	10	0
,, Bulk, in Bombay Bazaar, 125 deg. per 10 gallons..		3	3	0
Borneo oil in bulk		2	14	6
Burma Oil, in bulk, per 8 imperial gallons		2	11	0

TUBES FOR SALE.

FOR SALE, about 80 Tons of New 6-inch outside diameter Steel Tubes, ⅜-inch thick for 1,400 lbs. per square inch pressure, 16½-feet lengths, and flush joints, suitable for Oil Well Borings, etc.

These Pipes cost £22 per ton, and we can offer same subject to being unsold at £10 per ton.

Address "Tubes,"
Care of The Petroleum Review,
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IMPORTS of PETROLEUM into UNITED KINGDOM

FOR THE WEEK ENDED JANUARY 2nd, 1906.

Specially prepared for
this Journal by . . .
the Custom House.

DATE.	PORT INTO WHICH IMPORTED.	CONSIGNEE.	VESSEL.	PACKAGES.	DESCRIPTION OF OIL.	NUMBER OF GALLONS.	PORT WHENCE.
Dec. 27	London	Consolidated Petroleum Co.	Excelsior	Bulk	Gas	44,440	Philadelphia
,, 27	,,	,,	,,	Bulk	,,	36,930	,,
,, 27	,,	G. W. Sheldon and Co.	Maine	138 pks.	Lub. Comp.	2,800	New York
,, 27	,,	Mordaunt Bros.	,,	60 brls.	Lub.	2,500	,,
,, 27	,,	London Oil Storage Co.	Nerissa	52 pks.	,,	1,690	Hamburg
,, 27	,,	Burt, Boulton and Haywood	Commercial	575 brls.	Creosote	23,000	Salzaste
,, 28	,,	Anglo-American Oil Co.	Tampican	1000 brls.	Lamp	42,000	Philadelphia
,, 28	,,	Scott's Wharf	Maine	50 brls	Lub	2,000	New York
,, 28	,,	T. H. Lee	Iris	7 casks	,,	450	Hamburg
,, 28	,,	J. W. Baker	Matlekovits	104 brls.	,,	4,850	Fiume
,, 28	,,	Fielder, Hickman and Co	Maine	1021 brls. 251½-brls.	,,	45,880	New York
,, 28	,,	G. W. Sheldon and Co.	Minnetonka	48 pks	Lub. Comp.	2,980	,,
,, 28	,,	,,	,,	100 cases	Lub. Gr.	390	,,
,, 28	,,	Scott's Wharf	,,	50 brls.	M.Lub.	2,000	,,
,, 28	,,	Produce Brokers	Grebe	95 brls.	,,	3,800	Antwerp
,, 28	,,	Mordaunt Bros.	Leigei	13 pks. 10 brls.	R.Tar oil	2,340	Riga
,, 28	,,	Joseph Barber and Co.	Portia	13 casks 10 brls. 31 drums	Lub, Gr.	720	Hamburg
,, 28	,,	Anglo-American Oil Co.	Maine	517 brls.	Lub.	20,680	New York
,, 28	,,	,,	,,	180 brls.	Min. Colz.	7,200	,,
,, 28	,,	Vacuum Oil Co.	Nerissa	5 brls.	Lub	200	Hamburg
,, 28	,,	Fielder, Hickman and Co.	Eagle Point	120 brls	,,	4,800	Philadelphia
,, 28	,,	,,	Minnetonka	333 brls.	,,	13,320	New York
,, 28	,,	,,	,,	150 cases	,,	800	,,
,, 28	,,	Penn. and Delaware Oil Co.	,,	60 brls.	,,	2,400	,,
,, 27	Liverpool	Meade-King, Robinson and Co.	Haverford	50 brls.	M. Lub.	2,000	Philadelphia
,, 27	,,	W. Gibson and Sons	Devonian	50 brls.	Lamp	2,050	Boston
,, 27	,,	Pickford's Ltd.	Rutland	95 pks.	Lub.	560	Hamburg
,, 27	,,	C. W. Field	Moorhen	6 brls.	,,	250	Antwerp
,, 27	,,	E. H. Kellogg and Co.	Carmania	100 brls	M.Lub.	4,000	New York
,, 27	,,	Cunard Steam Shipping Co.	,,	60 brls.	,,	2,400	,,
,, 27	,,	Valvoline Oil Co.	,,	385 brls	,,	15,780	,,
,, 28	,,	Anglo-American Oil Co.	Genesee	Bulk	,,	470,000	Philadelphia
,, 29	,,	Bramwell, Fern, and Co.	Bovic	20 brls	,,	800	New York
,, 29	,,	G. B. Taylor	Tadorna	89 brls.	Lub. Gr.	3,560	Rotterdam
,, 30	,,	W. B. Dick and Co.	Noordland	159 brls	Lub.	6,220	Philadelphia
,, 30	,,	,,	Victorian	300 brls.	,,	12,000	New York
,, 30	,,	,,	,,	50 brls.	Lamp	2,000	,,
Jan. 1	,,	G. B. Taylor	Noordland	140 brls.	M.Lub.	4,520	Philadelphia
,, 1	,,	A. Hopps and Sons	,,	125 brls.	,,	5,000	,,
,, 1	,,	Midland Railway Co.	,,	51 brls.	Lub.	2,200	,,
,, 1	,,	Crew, Levick Co.	,,	977 brls.	M.Lub.	40,160	,,
,, 2	,,	Meade-King, Robinson and Co.	,,	1360 brls	,,	54,400	,,
,, 2	,,	,,	,,	200 brls.	Resid.	8,000	,,
,, 2	,,	Crew, Levick and Co.	,,	25 brls.	M. Lub.	1,100	,,
,, 2	,,	Vacuum Oil Co.	Victorian	300 brls. 231½-brls.	Lub.	16,600	New York
,, 2	,,	W. B. Dick and Co.	,,	300 brls.	,,	12,000	,,

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BUILDERS OF
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And Every Description
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To Dealers only.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Jan. 2	Liverpool	W. Gibson and Sons	Canadian	50 brls.	Lamp	2,050	Boston
,, 2	,,	Evan Leigh and Scn	,,	50 brls.	Lub.	2,000	,,
,, 2	,,	Meade-King, Robinson and Co.	Norseman	1417 brls.	Pet. Spirit	70,800	Rotterdam
Dec. 28	Bristol	W. Smith and Co.	Jersey City	500 brls.	Lub.	20,000	New York
,, 28	,,	H. R. James and Son	,,	165 brls.	,,	6,600	,,
,, 27	Goole	Goole Steamship Co.	Altona	25 brls.	M.Lub.	1,000	Antwerp
,, 28	Grimsby	J. Sutcliffe and Sons	Wrexham	30 casks	Lub.	750	,,
,, 28	Hull	Meade-King, Robinson and Co.	Tantallon	415 steel brls	Naph.	16,600	Rotterdam
,, 28	,,	T. Wilson, Sons, and Co.	Cato	25 brls.	Lub	1,000	Antwerp
,, 28	,,	,,	,,	382 brls.	,,	15,280	,,
,, 28	,,	,,	Gitano	4 brls.	,,	160	,,
,, 28	,,	W. Gillyott and Co.	Gibraltar	60 brls.	,,	2,400	New York
,, 28	,,	,,	,,	237 brls.	,,	9,480	,,
,, 28	,,	T. Wilson, Sons and Co.	,,	1030 brls.	,,	41,200	,,
,, 28	,,	,,	Beysund	50 brls.	Tar oil	2,000	Stockholm
,, 29	,,	,,	Consuela	1531 brls.	Lub.	61,240	New York
,, 28	Manchester	Anglo-American Oil Co.	Chesapeake	Bulk	Lamp	373,410	Philadelphia
Jan. 1	,,	,,	Genesee	Bulk	Lub.	145,000	,,
Dec. 28	Newcastle	Tyne-Tees Steam Shipping Co.	Juno	75 brls.	M.Lub.	3,000	Antwerp
,, 28	,,	,,	,,	34 brls.	,,	1,360	,,
,, 30	Shields, S.	Stephens, Sutton and Stephens	Kura	Bulk	Illum.Resid.	230,000	Hamburg
,, 28	Dundee	D. Alexander and Sons	Cumberland	6 brls.	Lamp	240	,,
,, 28	Glasgow	Burell and Son	Baron	300 brls.	Lub.	12,200	Trieste
,, 29	,,	Anchor Line	Caledonia	370 brls.	,,	14,800	New York
,, 29	,,	,,	,,	2045 brls.	,,	81,640	,,
,, 29	,,	,,	Furnessia	1872 pks.	,,	64,130	,,
,, 29	,,	J. and A. Allan	Laurentian	18 bls.	,,	720	Philadelphia
,, 27	Leith	Graham-Yooll and Co.	Weimar	200 brls.	Lamp	8,720	Hamburg
,, 28	,,	J. Currie and Co	Scalpa	238 pks.	Lub.	5,620	,,
,, 28	,,	Graham-Yooll and Co.	Breslau	100 br ls.	Lamp	4,360	,,
,, 28	,,	,,	Coburg	50 brls.	,,	2,180	,,
,, 28	,,	G. Gibson and Co.	Nigel	64 brls.	Lub.	2,560	Antwerp
,, 28	,,	,,	Astrologer	6 brls	,,	240	,,
,, 28	,,	W. G. Yooll and Co.	Coblenz	101 brls.	Lamp	4,400	Hamburg
,, 29	Cork	Cork Steam Shipping Co.	Odin	750 brls.	,,	30,000	Rotterdam
,, 28	Belfast	J. C. Pinkerton and Co.	City of Belfast	7 brls.	Lub.	350	Antwerp
					Net Total	2,171,260	

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO JANUARY 2nd, 1906.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.
Austria	—	882,400	17,050	472,100	—	123,720	—	1,583,800	—	—	—	—	—	—	17,050	3,052,020
Belgium	—	7,730	29,750	777,100	—	5,200	—	—	—	17,800	—	290	—	6,205	29,750	814,325
Borneo	—	—	—	—	—	35,000	—	—	—	—	—	714,000	—	—	—	749,000
Canada	—	—	—	137,030	—	78,300	—	10,000	—	—	—	—	—	—	—	225,330
Germany	249,900	5,795,960	9,240	1,112,020	—	4,000	—	1,600	—	—	—	—	—	21,080	259,140	5,935,060
Holland	30,000	210,030	3,560	12,840	—	—	—	2,240	87,400	1,564,930	—	—	—	40,470	120,960	1,830,110
Roumania	—	1,469,650	—	927,000	—	—	—	3,253,520	—	—	—	—	—	—	—	5,650,170
Russia	—	49,845,550	—	7,211,930	—	—	—	10,607,850	—	110	—	—	2,340	6,370	2,340	76,671,810
Sumatra, &c	—	—	—	—	—	—	—	—	—	6,263,000	—	—	—	—	—	6,263,000
U.S.A.	421,710	104,005,080	1,288,940	32,637,206	8,000	50,020	81,370	46,961,100	—	10,409,200	—	9,972,762	7,200	878.240	1,807,220	206,223,594
Other Countries	—	870	—	61,970	—	—	—	—	—	—	—	120	25,000	208,780	25,000	272,540
	701,610	162,217,270	1,348,540	44,349,196	8,000	296,240	81,370	62,420,110	87,400	18,225,040	—	10,687,172	34,540	1,161,145	2,261,460	307,686,959

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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XIV. *(New Series.)* January 13th, 1906. No. 358.

Editorial Notes.

Our Semi-Annual Index. We are constantly receiving enquiries as to the exact date when the index of the Petroleum Review for the last half of 1905 will be published. As is well known to our subscribers, we generally issue our semi-annual classification of the contents of the Review soon after the close of each half year, but on this occasion, owing mainly to pressure of work, the index will not be published until about the middle of next month.

Roumanian Petroleum Exports. Roumania's petroleum exports continue to increase, and the figures just published of the details for the November exports, shew a decidedly healthy tone in the petroleum trade of Roumania. It is, perhaps, premature yet to speak of the country's export trade for the whole year, but having the figures for the eleven months before us, an easy calculation shews that Roumania's export petroleum trade last year reached figures which were far ahead of all past records. She approximately exported 210,000 tons of petroleum products as against 168,000 tons in 1904, and 126,000 tons for the year 1903. The great increase has been mainly in the export of illuminating oil, which now exceeds 50 per cent. of the total exports, but the trade in export benzine is also progressing very rapidly, and for the past year exceeded 50,000 tons. A strangely different picture is presented from the point of view of the petroleum trade, when Roumania and Russia are placed alongside. In the former country, its export trade is almost "strung up" for the present by the complications of the Caucasus, and the whole industry is in a most deplorable state, while in Roumania, its production is increasing month by month, the workers are contented, and remarkable activity is now everywhere the rule.

An Isolated Oil Field Region. Baku is still cut off from the outside world so far as telegraphic information is concerned, and though there is every reason to believe that the petroleum industry of the Caucasus is gradually coming round to a normal position, no advices are to hand to substantiate this opinion. One fact stands clearly out as pointing to the progress that is being made in oil field operations—the production is rapidly increasing, and for November almost reached its normal level, it being estimated at over 30,000,000 poods. We have all along contended that the troubles which have during the past few months swept the Caucasus—indeed the whole of Russia—would render a dislocation of the petroleum industry of no very great duration, and though we felt that matters would right themselves at the turn of the year and that the production would quickly rise, we must admit that we had but faint hopes that the wells would return over 30,000,000 poods to the producers for November. In spite of rumours now freely circulated that more trouble is to overtake the Baku industry, the fact that prices are gradually but consistently returning to their normal level is reassuring.

The Use of Oil Fuel in England. In spite of the generally admitted superiority of liquid fuel as compared with coal as a power raiser, it has in this country made little headway since its introduction, owing entirely to the fact that while supplies were somewhat difficult to obtain in large quantities and at frequent intervals, there was an abundance of coal at a moderate price. If the report which now reaches us from California, however, be correct, liquid fuel is destined in a short time to make rapid headway this side the Atlantic, for we learn that the Union Oil Co., of California, is about to lay an oil pipe line across the Isthmus of Panama, in order to be in a position to carry out large and important fuel contracts which have been arranged in England. The pipe line will be forty-two miles long, and it is estimated that the cost will exceed one million dollars. There cannot be any two opinions of the future of liquid fuel in this country if only a continuous supply were assured, and now that it will soon be possible for the Californian product to compete with the Texas fuel, we may expect to see rapid advancement made in its use.

Concerning the American Petroleum Industry. As we anticipated, the past year established a new record both in regard to the production and consumption of petroleum in America. In the case of the former it is estimated that the grand total will approximate about 130,000,000 barrels, and this has been derived from 15 states and territories. While the production of high grade oils has held up well during the year, it has been much less than the demand called for, and consequently, as we have stated in the Review month by month, stocks have considerably diminished. The increase in the total production of the American fields has been in the lower grade of oils—the product of Texas, Kansas, and California. A writer in the *Houston Daily Post*, estimates the production and consumption during the past year as under (in barrels):—

Fields.	Production.	Consumption.
Texas and Louisiana	40,000,000	28,000,000
California	30,000,000	24,000,000
Pennsylvania	27,000,000	31,500,000
Ohio and Indiana (Lima oil) ..	21,000,000	24,000,000
Kansas, Indian Territory and Oklahoma	11,000,000	3,000,000
Kentucky and Tenessee ..	1,300,000	1,400,000
Other States	1,000,000	600,000
Totals	131,300,000	112,500,000

AMERICAN NOTES.

A New Oil Steamship Line.—A new oil steamship line has been established between Port Hartford, California and Honolulu, having been organised by the Union Oil Co. of California under the title of the Union Steamship Co.

In Cumberland County.—Some very important deep drilling is now being done in Cumberland county, where a large shallow sand development has been proven. A company is now drilling a series of deep searchers in the shallow sand region, and will endeavour to prove the correctness of their theory that deeper oil exists.

The Kentucky Petroleum Fields.—A writer, in the current issue of the *Oil, Paint and Drug Reporter*, states that though there has for some time been a gradual falling off in the production of some of the divisions of the field, this has been more than offset by the increase in others, and the indications point to the fact that the productions for the entire field for 1905 will reach 1,250,000 barrels at least, or an increase of a quarter of a million barrels over the production of 1904.

A New Producing Locality.—A new region has been recently opened up in the lower Kentucky oil fields by strikes of the wildcat variety, and a large number of wells are now being sunk. In what is known as Stubensville extension, in Wayne county, a well was finished toward the end of the year with an initial flow of 300 barrels. This well is within two miles of the Russell strike, which was the first well sunk in the new field with a production which started at 500 barrels per day. The Standard Oil Co. has now completed a pipe line extension to the locality, and several wells are already connected up.

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PRODUCTION OF DUTCH-INDIAN PETROLEUM COMPANIES IN 1905.

The following are the figures of the production of the Dutch-Indian petroleum companies in 1905 compared with previous years: –

	1905.	1904.	1903.
Royal Dutch Co.—	(In units of refined oil).		
Units of refined oil (including the output of the Sumatra-Palembang Co. and the Moeara Enim Co.	8,476,700	6,448,800	5,329,450
Moeara Enim Co.—	(Tons of crude).		
Tons of crude oil	139,800	2,530,100	1,756,600
Sumatra-Palembang Co.—			
Units of refined oil ..	574,500	761,500	803,000
Dortsche Petroleum Co —			
Cases of refined oil ..	2,007,310	1,989,900	1,698,900
Moesi-Ilir Co.—			
Units of refined oil ..	244,902	324,224	324,768
Panolan Co.—			
Units of refined oil ..	569,935	728,572	655,954
Mines, Forests and Lands Exploitation Co. of Langkat.—			
Units of refined oil ..	1,732,675	1,694,735	1,508,461

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RUSSIAN NOTES.

Without Change.—Since we last spoke of the prices of petroleum and petroleum products in the Interior, there has been no change to record, the most recent political events having had no great influence upon the various markets. It is believed that with the rapid increase in the production at Baku, the abnormally high prices will disappear.

Nijni-Novgorod Prices.—With the passing of the season for large sales of petroleum at Nijni-Novgorod, there is little trade doing. The retail prices of kerosene are now five copecs lower than they were a few days ago, having been reduced from 1 rouble 40 copecs to 1 rouble 35 copecs per pood in cases, and 1 rouble 30 copecs in bulk. The large firms have readily accepted the offer of the Town Council to supply the poorer classes with oil at a cheaper price, this now one rouble, at which figure 7,000 poods have already been sold. The Town Council is to organise regular sales at still lower prices.

THE EXPORTATION OF ROUMANIAN PETROLEUM DURING NOVEMBER.

During the month of November the exportation of petroleum and petroleum products from Roumania continued to increase, and, in fact, reached a quantity of 31,944 tons, a figure much higher than any registered in the past. During the eleven months of 1905, ended November, the petroleum exports of Roumania, compared with the figures for 1904 and the similar period of 1903, were as under:—

	Eleven Months, 1903.	Eleven Months, 1904.	Eleven Months, 1905.
Crude petroleum ..	50,111	44,275	47,884
Refined petroleum ..	44,934	75,170	100,520
Benzine	21,302	36,319	46,250
Total ..	116,347	155,764	194,654

It will therefore be seen that for the eleven months of 1905 the exports of petroleum from Roumania were 38,890 tons in excess of what they were during the similar period of 1904, and 78,307 tons greater than was the case for the eleven months of 1903.

The exports of petroleum for November (in tons) were destined for the following countries:—

	Crude Petroleum, Distillate, Gas Oil, etc.	Refined Oil.	Benzine.	Total.
England	5,651	10	—	5,661
Austria-Hungary	383	575	10	968
Bulgaria	169	14,389	12	14,570
France	1,042	—	4,616	5,658
Germany ..	—	—	489	489
Italy	8	—	—	8
Norway	1,141	1,610	—	2,751
Russia	—	—	197	197
Turkey	46	1,588	—	1,634

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GALICIAN PETROLEUM PRODUCTION.

NOVEMBER STATISTICS.

Producing Districts.	To Store on 31st Oct., 1905.	Production.	Expedition.	Worked and used in the Fields.	To Store on Nov. 30th, 1905.
West Galicia					
Potok ..	56,470	15,260	17,367	1	54,362
Rogi ..	162,515	13,053	20,247	223	155,028
Rowne ..	4,176	1,346	3,359	—	2,163
Tarnawa and Wielopole	56,126	43,538	43,311	200	56,153
Krosno ..	117,308	35,857	23,065	—	130,100
Other wells.	120,638	28,030	42,160	500	106,008
Total ..	517,233	137,884	149,509	994	503,814
East Galicia					
Boryslaw ..	3,922,935	471,248	393,133	14,000	3,987,050
Schodnica ..	345,517	45,260	49,525	2,110	339,138
Urycz ..	230,675	15,190	21,756	2,630	221,479
Mraznica ..	20,115	1,500	1,400	523	19,692
Other wells.	3,336	8,800	7,500	1,400	3,236
Total ..	4,522,578	541,998	473,314	20,667	4,570,595
Grand total	5,039,811	679,082	622,823	21,661	5,074,409

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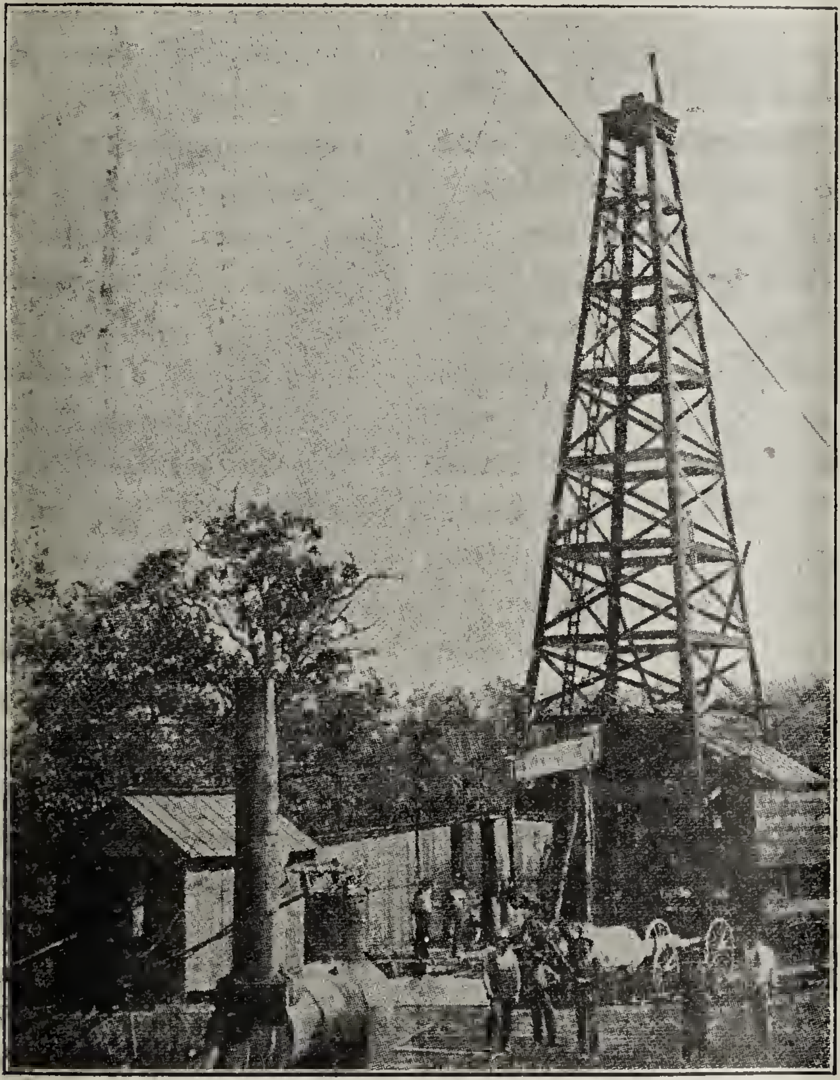
MOVEMENT OF PETROLEUM PRODUCTS IN HOLLAND IN DECEMBER.

	Amsterdam. Barrels.	Rotterdam. Barrels.
Stock on 1st December	31,424	135,554
Imports in December	68,220	60,332
Deliveries	65,313	159,882
Stock on 31st December	33,330	36,004

A Year's Developments . . . . . Around Bartlesville.

THE GROWTH OF A . . REMARKABLE FIELD.

In its most recent issue, the *Bartlesville Examiner* gives an exceedingly interesting account of the developments which have taken place in and around Bartlesville during the past twelve months. At the outset, it states that at the beginning of 1905, the oil taken from the then practically new and untried field lying south of the Kansas line was shipped in tank cars to the refineries, but Indian Territory and the Osage reservation were beginning to attract considerable notice, and oil men who had given the matter of leasing the lands in the Territory little thought, began to look into details. Most of the previous developments had been about Bartlesville and along the Osage-Cherokee line and some large wells had come in, producing naturally. The Prairie Oil and Gas Co. announced that it would take care of the production as fast as possible. All available tank cars were placed in service, but only a portion of the oil could be handled; and as the field was extended and as production increased, a pipe line was run through the field following the line from Kansas through Bartlesville and south to Ramona and to Cleveland. Lateral lines were run to tributary districts, and it was believed at the time that the production could be taken care of, with the aid of a few tanks. By the time this line was completed the production had increased to a point where it was found necessary to still further amplify the storage capacity. A tract of land was purchased near Ramona for the construction of possibly fifty 35,000 barrel tanks.



One of the Earliest Producers in the Field.

Officials stated that this number of tanks, supplemented by others at the various pumping stations and at Cleveland, with those already up, would enable the corporation to take all the oil offered. A crew of workmen landed at Ramona and the building of tanks began. Before 30 had been completed, it was found that they would be totally inadequate to care for the production, and an addition to the farm was purchased, and as it now is, 116 tanks, each having a capacity for holding 35,000 barrels of crude petroleum, are up, and another tank farm, a mile and a-half north of Copan, has been purchased, and it is the announced intention of the company to erect thereon 120 tanks of 35,000 barrels capacity each.

At Cleveland, there are a dozen tanks of equal size, while a large number of others are scattered over the field. Added to this, the company has constructed a pipe line from this field to Whiting, Ind., and even with the tankage in Kansas the question of caring for oil was a puzzle. The Prairie Oil and Gas Co. announces that it is not able to find immediate storage for all the oil offered, and another pipe line to Whiting is being constructed and oil will be pumped from the field into the tanks of the company in Indiana, Ohio, and even to Bayonne, N.J.

At the beginning of the year the Prairie Oil and Gas Co. made the statement through its attorney to the commissioner of corporations, that there had been purchased on an average 25,601 barrels of crude petroleum daily, of which amount there was being delivered to refineries an average of 10,175 barrels daily, most of which at that time was coming from the Kansas field. Now, according to officials for the same company, there is run from that portion of the Southwestern field, south of the Kansas line, an average of 35,000 barrels per day, while the Kansas production is steadily falling down, and if all the oil could be run that the wells in Indian Territory and Oklahoma are capable of producing, the figures would shew about 55,000 barrels a day, for the bringing in of big wells and the opening up of new pools is steadily bringing the production up.

According to records of Cherokee nation and Osage reservation production from January 1st, to December 31st, 1905, there was a total of at least 98,735 barrels of new production. In the Osage there was shewn to have been 2,720 barrels new production during the month of January and has since hovered about the 4,000 barrel mark. In the Cherokee, both the shallow and deep sand pools of the Bartlesville, Chelsea-Alluwee-Coody's-Bluff districts being given, shewed 1,847 barrels new production in January and the banner month of November shewing 9,115 barrels. In the Creek pools there has been little change. At the beginning of last year most of the drilling was in the shallow sand territory about Red Fork, but these wells soon proved to be unprofitable and were abandoned, while many dry holes and few large wells rewarded the efforts of the producer in the deeper sand. The new production in the Osage figures 44,315 barrels during the twelve months; Cherokee, 50,611 barrels, and Creek 3,805 barrels. In the Osage there were completed 517 wells; Cherokee 1,682, and Creek 219, a total of 2,418. Of this number 326 were dry and 117 produced only gas, leaving a total of 1,975 oil wells. Many of them started out with a production of five to 15 barrels and simmered down to practically nothing and were abandoned. The number thus deserted as unproductive cannot even be estimated. It is announced by Prairie Oil and Gas officials that there are about 2,219 wells in the territories attached to the pipe lines of the company, among these being a large number completed before the present year.

To give an idea of the extent of the Territory oil field, a few figures have been compiled, shewing in detail the developed and undeveloped divisions of the same. Taking the Osage reservation, oil has been found in most of the townships east of the range 9 line, with comparatively scattering work in the section leases. While some of this territory has proved unproductive on single tests, one well being supposed to prove several miles of territory, yet the defined territory of the Osage can be said to commence at the range 9 line and extend to the Cherokee. There are 348 lots, the first tier of 116 embracing about 1,080 acres each, and the second and third tiers three half sections, or 960 acres each, a total of 791,000 acres, and in the sections there are within the possible field 445,440 acres, making a total of 1,236,440 acres. Much of this has been proved, especially in the lots, yet there are hundreds of thousands of acres which there is every reason to suppose are in the producing zone that have not been tested.

In the Cherokee the figures are even more startling. This division is expanding so rapidly that exact figures are hard to obtain. Most of the deep sand drilling in the Bartlesville district has been in ranges 12 and 13, yet there is production in ranges 14 and 15; and the possibilities of this vast area of virgin territory can only be imagined. With scarcely any development east of range 14 to range 16, there are many thousands of acres under lease that must be tested before the lapse of a year from the time of approval, and oil operators expect some immense pools to be opened up. Within the defined pools of the deep and the shallow sand subdivisions of the Cherokee there are approximately 1,000 sections of land, or 640,000 acres. While this is inside what is the proven territory, there is every reason to believe that the extensions that will be shewn in the year 1906 will add at least 200,000 acres to this.

In Kansas there has been little doing during the past year. Proven territory has been developed for the most part, and there have been few extensions of any of the districts. In the Cleveland pool most of the drilling has been on the town lots and the tracts adjoining the townsite, yet there is being a gradual extension south, but nothing has been discovered to date so promising as the Cleveland townsite, which is now practically drilled out.

Some remarkable facts can be brought to light with respect to the large amount of money expended by the Standard Oil Co. in giving encouragement to the producers and in taking care of the product. According to statistics furnished by the offices of the Prairie Oil and Gas Co., there are now 105 tanks completed at Ramona, with nine more to be finished; nine at Copan, with 96 more to be constructed as fast as men and material can be obtained; one at Chelsea, three at Bartlesville, 27 at Cleveland, two at Tulsa, 129 at Neodesha, 76 at Caney, 26 at Humbolt, and three at Kansas City—all being used in storing the production taken from the south-western field, most of which comes from Indian Territory. With the tanks already up, and those under construction, and to be completed, within the year, will mean 477 tanks, each with a capacity for holding 35,000 barrels of crude oil, or a total of 16,695,000 barrels. It costs to construct these tanks, aside from the value of the land, 22 cents per barrel, or $3,672,900. Filled with oil costing from $1 down to 50 cents a barrel, averaging probably 60 cents, aside from the cost of pumping and other incidental expenses, the oil that will be contained in these tanks when filled would approximate $10,017,000; and with the tanks, $13,689,900. It is difficult to estimate the cost of the numberless lines, but probably $1,000,000 would not cover the expenditure. Then there are the mammoth pumping stations at Cleveland, Ramona, Bartlesville, Chelsea, Coody's Bluff, Sand Creek, and other places, and an army of employés are working in the field, so that if the actual figures of a year's expenses could be arrived at accurately they would be truly astounding.

The two largest tank farms in the Territory, the land comprising which, located at Ramona and Copan, costs $30 an acre. The Ramona farm contains 370 acres, and the Copan farm 340 acres. Attached to the pipe lines of the Prairie Oil and Gas Co. south of the Kansas line are 2,219 producing oil wells, the average production of which, according to figures derived from the oil runs, is 17·5 barrels per day. This does not mean that the wells would not produce more oil; it means that they are at present producing that amount, but, owing to a lack of facilities for caring for all the oil that could be obtained, many of the wells are shut down at least a portion of the time. D. C. Stewart, field superintendent for the Prairie Oil and Gas Co. in the Territories, estimates that the wells would probably average 27 barrels if all the oil could be run as fast as the tanks were filled.

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A New Enterprise.—A new petroleum enterprise has just been founded in Roumania under the name "Montana," with a capital of 250,000 francs. The founders are Messrs. Ruzicka, Elias, Taubes, Löwenbach and Bluman, each bringing in the sum of 50,000 francs.

THE UTILISATION OF LIQUID FUEL.

IMPROVEMENTS TO FURNACES.

With the coming to the front of the use of liquid fuel in this country, the patent recently accepted upon the subject of improvements in furnaces for the utilisation of liquid fuel will be of great interest. The inventor is Mr. Eugenè Scherding, of 52, Rue Laffitte, Paris, civil engineer, who, in his provisional specification states that apparatus generally intended for the use of liquid fuels either in conjunction with solid fuels or not have been hitherto based upon the well-known principle of injecting into the furnace a certain quantity of liquid fuel, by means of steam or compressed air, combined with atmospheric air. The appliances hitherto tried have frequently proved unsatisfactory.

The main cause of this want of success is due to the omission of the application of a fundamental principle which consists in a division of the functions for finally obtaining rational mixtures of the combustible bodies with their equivalents of indispensable comburents.

The apparatus which forms the subject of the present invention serves for mixed heating by means of liquid and solid fuels, and is especially intended to fill the lacuna above referred to.

The energy, velocity and quantities of the comburent and of the liquid fuel are regulated by observing the pressures indicated by one of the pressure gauges. It is, therefore, to the division of the functions to the preliminary preparation, and to the systematic distribution of the equivalent of the comburent required by the quantities of the respective combustibles that these results, which have never hitherto been attained in the heating of generators, locomotives and marine boilers, are due. The superiority of the mixing collector over all appliances hitherto known is very great, both as regards simplicity in operation, the ease of production, and the economies which it permits of.

The present description has reference to the accompanying drawings, in which:

Fig. 1 is a plan of the apparatus partly in section adapted to be placed at the front end of a locomotive fire box.

Fig. 2 is a section, on a larger scale, of the main details of the apparatus.

Fig. 1.

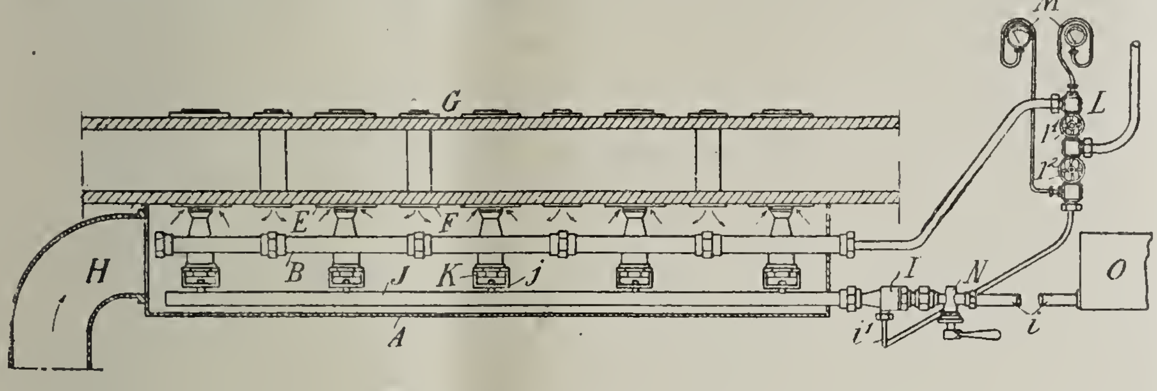

Fig. 4.

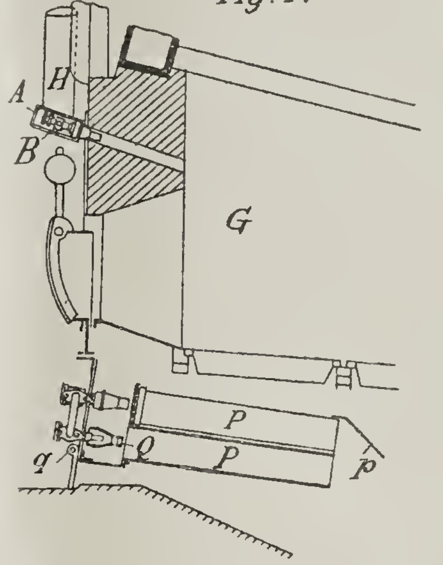

Fig. 2.

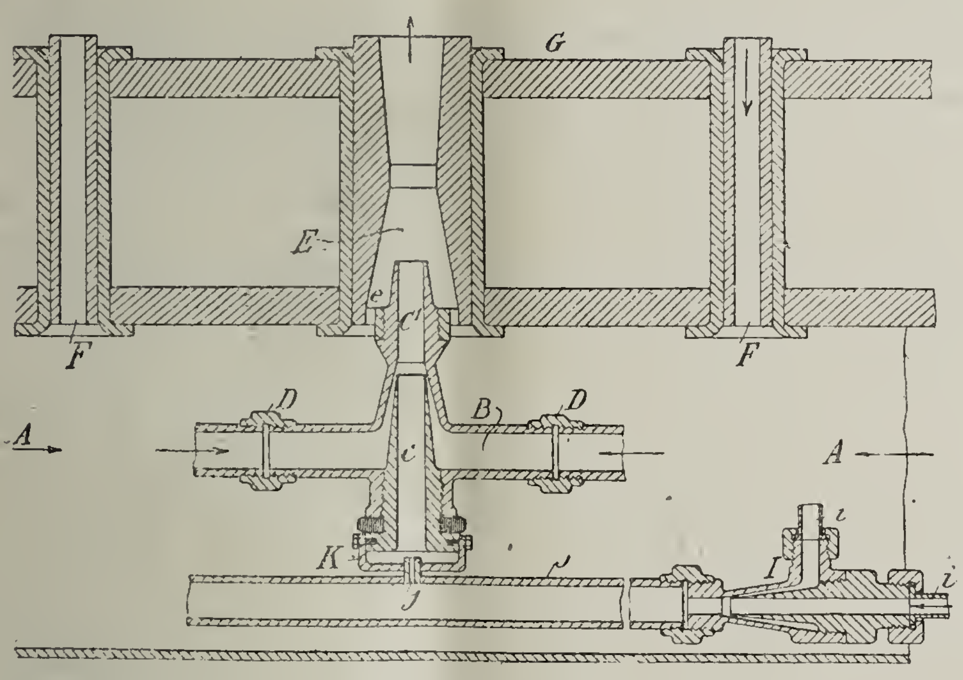

Fig. 3.

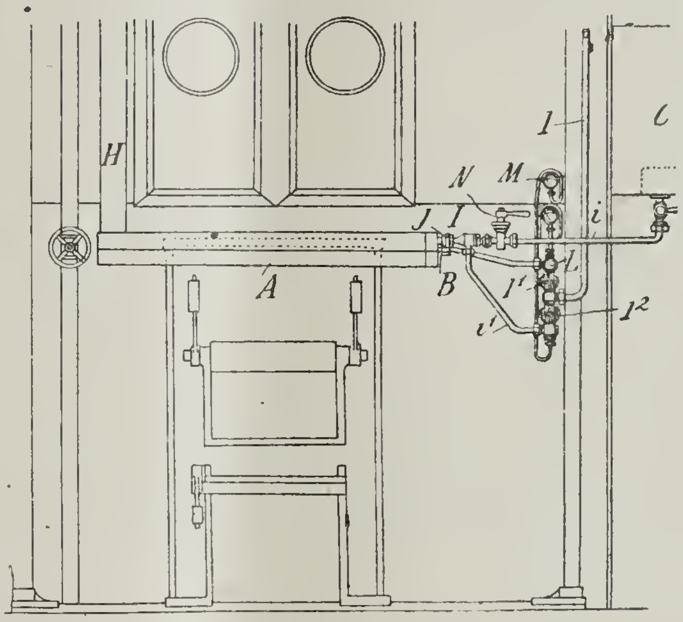

Fig. 3 is a front elevation of the apparatus as applied to the fire box of a stationary boiler.

Fig. 4 is a vertical section of a part of same, but with the addition of a blower beneath the fire bars.

At the front end of the box is a collecting chamber A for air and hot gases, in which is arranged a distributing pipe B, carrying suction mixers, having each a central tuyere C, and being connected together by means of couplings D. These mixers discharge into a series of of nozzles E.

A series of tuyeres F place the fire box on the side indicated by the letter G in communication with the collecting chamber A, and admit the hot gas from the fire box into the latter.

The outside air enters the chamber A through a pipe H.

I is a suction apparatus for the liquid fuel, comprising a central feed pipe *i* for the fuel, and a steam admission pipe i^1.

This apparatus I, is applied to a distributing pipe J, fitted with small bore connections j, which being held by stirrups K fastened on the central tuyeres C, can discharge axially into these latter.

L is a steam distributing apparatus, having with a main admission pipe l, two valves l^1 l^2 and two pressure gauges M, M.

The suction apparatus I communicates with a reservoir for liquid fuel, O, by means of a valve N, on the central feed pipe i.

It is known that if a fresh charge of coal is thrown into the fire box when the latter is working, the result is far from being a rise in the general temperature, the coal at once absorbing heat and liberating gas in consequence of the volatilisation of the bituminous portion of the coal.

Volatilisation is a process of a cooling character, on account of the transformation of heat from the active to the latent condition during the process.

If, at this instant, liquid fuel and air be projected into the fire box, the temperature is lowered still further, and these hydrocarbons, associating themselves with the carburetted hydrogen liberated from the coal, escape in the form of thick smoke, whilst the temperature of the fire box, and consequently the pressure of the boiler, falls immediately.

The combustion does not resume its normal condition until the combustion temperature (about 700° C.) of the carburetted hydrogen gases is attained—that is to say, after a great waste of heat units which have escaped the state of unconsumed steam and smoke.

The mixing collector enables these serious inconveniences and prejudicial loss of heat to be obviated, as it is arranged so as to furnish in turn and at the desired moment, a prepared supporter of combustion, at a high temperature; to the solid fuel substances that are on the grate, and also to the liquid fuel materials which are projected into the fire box.

At the moment the charge of solid fuel is thrown in, the valve l^1 is opened; the steam, passing through the distributing pipe, B, enters the suction mixers and, escaping by the narrow orifice of the annular crown formed round the end of the central tuyeres C, sets up a powerful suction effect in the latter.

This suction is transmitted to the air feed pipe H and also at the same time to the hot gas tuyeres F. The air and hot gases thus drawn in from their respective sources pass into the chamber A, where a primary mixture is formed.

This primary mixture passes into the central nozzle C, where it meets the crown of steam escaping from round this latter, the annular jet of steam enveloping and commingling with the mixture in the first preparatory chamber C^1.

A second preparation is effected in the nozzle E, where a second quantity of mixed air and gas, drawn in through the annular opening e, joins the first mixture, and the whole volume of the supporter of combustion thus prepared is projected into the fire box, where it mingles in turn with the combustible gases, with which it combines at once, and thereby ensures, so to speak, instantaneous and perfect combustion.

The entire bulk of the products of combustion is thus raised to a high temperature, the period of volatilisation is hastened, and a bright fire is quickly produced.

At this instant the valve l^2 is opened, and the steam entering the apparatus I draws with it the liquid fuel as it passes the annular crown formed by the central pipe i, the quantity of fuel admitted being regulated by the valve N.

The liquid fuel, heated and stirred up by the steam, is delivered into the distributing pipe J, and through the connections j into the central tuyeres C of the mixers, in which it meets with the supporter of combustion, and is intimately mixed and commingled therewith. The resulting combined and prepared mass is projected into the clear fire of the hot fire box, where it is immediately consumed without the formation of smoke.

In certain special cases the steam may be replaced by compressed air or air under pressure.

Figs. 3 and 4 shew the installation of the system on a stationary fire box, which is also fitted (in Fig. 4) with a blower under the bars. This blower consists of two wide pipes P P opening at one end into the fire box and at the other into the outer air; and towards this end they are fitted with suction tuyeres Q, set in action by steam nozzles q, and producing in the pipes P P a powerful draught of air which is discharged underneath the fire bars, but is prevented from striking too forcibly against the under face of the bars by a sloping baffle.

AMERICAN PATENTS GRANTED.

Electric Heater for Oil Wells. James E. Williamson and Charles E. Collins, Allegheny, Pa.

The combination, with the oil pumping tube, of a heater separate and separately removable therefrom, and having a casing and an inner tube surrounding said pumping tube, means connecting said casing and inner tube and forming a closed annular chamber, an electric resistance in said chamber, having suitable terminals leading out of the same and means for raising and lowering the heater around the pumping tube whereby different sections of the said tube may be heated.

System of Storing and Delivering Liquid Fuel. Clifford J. Campbell and Thomas F. Hall, New York, N. Y.

The system consists of a tank adapted to contain gasolene or analogous liquid fuel, a delivery pipe therefrom, a casing inclosing said tank and pipe with a space between them, a pipe adapted to supply water under under pressure to such space, a valve in said water pipe, a cylinder, a piston therein, a branch from said water pipe on each side of said valve and entering said cylinder on opposite faces of said piston, and an alarm actuated by the movement of said piston, whereby a change in pressure in said water pipe on opposite sides of said valve when the latter is closed will move the said piston and indicate such change.

Pulling Machine for Oil Wells. William A. Worrell and Leslie Fish, Vanburen, Ind.

A pulling machine, comprising a frame having wheels mounted upon one side thereof and a hook for draft purposes, a plurality of guys for securing the frame in inclined position, a shaft mounted on the frame, two drums of different diameters mounted on the shaft, a flexible member coiled upon each drum in opposite directions, a guide for the flexible member of one of the drums, a rachet wheel on the shaft, a pawl for engaging the rachet wheel, a brake connected wirh the shaft, an extension movably mounted upon the frame, said extension having an eye, said frame having a guide for the extension, a pulley mounted on said guide, a flexible member connected with said eye, passing over the pulley and adapted to be connected with said shaft, a frame on the extension, a pair of pulleys of different sizes upon the frame, and a flexible member passing over one of the pulleys and adapted to be connected with the shaft.

Combined Oil and Steam Regulating Valve for Burners. —R. J. Mullin, Seattle, Washington.

The combination with the casing having steam and oil inlet and outlet connections, the diaphragm, the oil and steam valves, a stem fixedly connected to said diaphragm and valves, and a spring; of the strainer chamber included in said oil inlet connection, and provided with a sediment draw-off opening upon one side of a strainer provided interiorly of the chamber, said strainer, and communicative connection between the said chamber upon the opposite side of said strainer from the draw-off opening and the said steam-inlet connection.

The Development of the Oil Lands in Indian Territory.

The development of oil lands in the Indian Territory and Oklahoma has resulted, says a special correspondent in the *Oil, Paint and Drug Reporter*, in a movement to secure legislation by Congress to enable oil operators to purchase or lease such Indian lands as are not actually needed for homestead purposes by the Indians to whom they have been allotted in the process of segregation, which has been going on for a number of years under Government supervision. In line with this movement a series of bills have been introduced in the House by Delegate McGuire, of Oklahoma, and Representative Curtis, of Kansas. They are supported not only by oil operators, but by numerous parties who desire to excavate asphalt beds, to quarry stone, to dig clay, etc., and strong pressure will be brought to bear upon Congress for their enactment.

Mr. McGuire's bills include a measure authorising the leasing of school lands in the territory of Oklahoma "for mining and quarrying purposes and the development and operation of oil and gas wells," and a measure allowing Indians to dispose of all surplus lands and removing restrictions on inherited lands. Mr. Curtis' bill authorises the Secretary of the Interior to add to the segregation of asphalt and coal lands in the Choctaw and Chickasaw Nations in the Indian Territory. Mr. McGuire's bill authorising the leasing of school lands is regarded as a measure of much importance, not only because of the known deposits of oil on certain tracts of these lands, but because of their wide extent and of the fact that they are scattered over a very large territory. Its principal provisions are as follows:—

"Be it enacted, etc., that the board for the leasing of lands reserved by the Congress of the United States in the territory of Oklahoma by act of Congress approved May 4th, 1894, entitled, 'An act ratifying the reservation of certain lands made for the benefit of Oklahoma Territory, and for other purposes,' be, and it is hereby authorised and empowered to lease the said lands, or any part thereof, in addition to the purposes and for the establishing and operating of stone quarries thereon, and the digging of clay thereon for the manufacture of brick, and for the development and operation of oil and gas wells thereon, such leases to be on such terms and length of time as the board for the leasing of said lands may determine.

"That all rentals derived from the leasing of said lands shall be paid by the said board to the treasurer of said Territory, for the benefit of the fund to which such proceeds belong; that is to say, that rentals derived from leasing of sections 16 and 36 and lands selected in lieu thereof, shall be paid to such treasurer for the benefit of the common school fund of said Territory, and the rentals derived from the leasing of section 13, mentioned in said act and other acts of Congress, and reserved for university, agricultural and mechanical college, and normal school purposes, and lands selected in lieu thereof, shall be paid to the said treasurer for the benefit of the fund belonging to said institutions, and the rentals derived from section 33, mentioned in said act, and any lands selected in lieu thereof, shall be paid to said treasurer for the benefit of the public building fund of the State of Oklahoma when created."

The bill presented by Mr. McGuire, allowing the Indians to dispose of all surplus lands and removing restrictions on inherited lands, is also a very comprehensive measure. It provides that owners of surplus lands over and above 160 acres, which they shall hold as their homestead, who desire to sell, may petition the Indian agent within whose territorial jurisdiction the land is located, praying that the land may be sold in accordance with the regulations provided by law. The petition must be signed by the owner or lawful heirs, and in case of minor heirs, by their legal representatives. A copy of the petition is to be forwarded by the Indian agent receiving it to the Commissioner of Indian Affairs at Washington. The agent is then required on each Monday morning to post in a conspicuous place for a period of 60 days a list of lands described in the petitions received by him during the week preceding, shewing the name of the owner, the description of the lands, the date when listed, and the date when bills will be opened. When any tract of land has been so listed, the agent is required to visit and appraise it at its true value, "according to his best judgment." A certificate of appraisement is then to be prepared and sealed, and not to be opened until sealed bids are opened. The appraisement shall not be made public, but no bid less than the appraised value shall be considered. The conditions governing bidders for such lands are set forth in the bill as follows:—

"That no bidder will be permitted to include more than one allotment in any bid.

"That if the prospective purchaser desires to bid on more than one allotment he must submit a separate bid for each allotment he desires to bid on.

"That all such bids shall be enclosed in a sealed envelope, which must be marked by the bidder 'Bids for surplus land;' and on such bids shall be a description of land, with the number of the land, and certified check on some solvent bank, payable to the Commissioner of Indian Affairs for the use of grantors, for 20 per cent. of the amount offered, as a guarantee of the faithful performance by the bidder of his proposition. If the bid shall be accepted, and the successful bidder shall, within thirty days after due notice, fail to comply with the terms of his bid, such check shall be forfeited to the use of the owner of the land.

"That the right to reject any or all bids is reserved, and such bids will only be accepted by such agent subject to the approval of the owner of the land.

"That the owner of said land shall pay all cost of conveying.

"That bidders may be present when bids are opened. When opened, the bids shall be so recorded, in a book kept for that purpose, as to shew the name of bidder, description of land, amount offered and action taken thereon.

"That listed land not disposed of at the appointed time may be re-listed under the same rules as governed the original listing.

"That the successful purchaser shall be given a period of four years in which to pay for said land. The payments on said land shall be as follows:—The full amount shall be divided into five equal payments of 20 per cent. each, 20 per cent. of full amount to accompany bid, and 20 per cent. on the same date for the next four consecutive years."

In order to prevent large tracts of land from falling into the hands of individuals it is provided by this bill that no successful bidder shall receive a title to more than 160 acres of land. It is obvious, of course, that this regulation can not be strictly enforced in the case of a number of individuals who are organised into a firm or corporation, but the tendency will be to prevent the monopolising of the lands thus placed on sale.

The Curtis' bill, which is designed especially to develop the asphalt deposits in the lands of the Choctaw and Chickasaw tribes, reserves from allotment certain specified areas which are then either to be sold or leased to parties desiring to develop them. The principal section of the bill is as follows:—

"That the Secretary of the Interior is hereby authorised and empowered to segregate and reserve from allotment, and to cancel any filings or applications that may heretofore have been made with a view to allotting, the following described lands, situate in the Choctaw Nation, Indian Territory, to wit:—The north-west quarter of section 12, the west one-half of the west half of section 11, the north half of section 14, and the east half of the north-east quarter of section 10, all in township 5 north, range 15 east, containing in the aggregate 750 acres more or less."

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{11}{16}$-$\frac{13}{16}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	3/9-4/3
,, ,, ..	£650,000 5½% Pref.	£1	6/9-7/9
Californian Oilfields	£250,000 Ord.	£1	$6\frac{11}{16}$-$6\frac{13}{16}$
European Petroleum.. ..	£550,000 Pref.	£1	$\frac{3}{16}$-$\frac{5}{16}$
,, ,, ...	£550,000 Ord.	£1	1/0-2/0
,, ,, ...	£376,000 Deb.	£100	87-90
Russian Pet. & Liquid Fuel ..	£500,000 6½% Pref.	£1	14/0-15/0
,, ,, ...	£600,000 Ord.	£1	14/6-15/6
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	3⅜-3⅝
,, ,, ...	£575,000 Ord.	£1	10/0-11/0
Shell Transport & Trading ..	£2,000,000	£1	22/0-23/0
,, ,, ,, ..	£1,000,000 Pref.	£10	9⅛-9⅜
Spies Petroleum Company ..	£312,500	10s.	7/6-8/0

RUSSIAN COMPANIES.

Company.	Nom. Value in Roubles.	Quotations on Jan. 4. Lowest Roubles.	Quotations on Jan. 4. Highest Roubles.
Baku Naphtha Co.	100	420	425
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	4,200	4,250
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	175	177
Naptha Trading Co., Petrol.	250	—	—
Nobel Bros.	5,000	8,950	9,050
,, ,, ...	250	—	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

SCOTCH COMPANIES.

Supplied by Messrs. MACLEAN AND HENDERSON, STIRLING.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. 8½ pd	£199,750	£10	$18\frac{1}{16}$
Do. 6% Cum. Pref. ..	£100,000	£10	$12\frac{1}{16}$
Burmah Oil, Ord.	£1,100,000	£1	58s. 0d.
Do. Pref.	£250 000	£1	25s. 0d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	9¼
Do. 5% Pref. ..	£18,900	£7	5¼
Oakbank Oil Co., Ltd., Ord. (fy. pd)	£45,000	£10	18
Do. New (£8 10s. pd.)	£131,750	£10	16½
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	80s. 0d.
Do. 6% Cum. Pref.	£100,000	£10	12¾
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	37s. 6d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	66s. 0d.
Do. "B" Deb...	£150,000	£100	150

DUTCH COMPANIES.

Company.	Quotations Jan. 3rd.	Quotations Jan. 10th.	Florins.
Arnhemsche Petroleum Mij. ..	81	81	1,000
Dordtsche Petroleum Mij. (Pref.) ..	124	126	500
,, ,, ,, (Deb. 4½%)	102¾	102¾	1,000
Elzasser Petroleum Mij.	44	44	1,000
Gaboes ,, ,, ...	19¾	19¾	—
Holl. Rumeensche Petroleum Mij...	21⅝	21⅝	1,000
Int. Rum. Pet. Mij.	91	91	500
Java Petroleum Mij...	30	30	1,000
Koninklyke Nederl. Pet. Mij. Shares	387½	395	250-1,000
,, ,, Share certificates	389½	398	1,000
Mœara Enim Petroleum Mij. ..	105	108½-109½	100
,, ,, 1-1,000 Oblig. 5	102½	102¾	250-1,000
"Moesi Ilir" Petroleum Mij. ..	36½	34½	—
Nederl.-Rumeensche Petroleum Mij.	15	16	
Nieuwe Ned. Petroleum Mij. And...	55¼	55¼	1,000
Oliebronnen in Hannover Mij. ..	151	149½	—
Panolan Maatschappij Cert. ..	350½	350½	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	134	136	1,000
,, ,, (Common) ..	88½	93½	—
Sumatra-Palembang Petroleum Mij	59½	59	500

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 11th January, 1906, as follows:—

The quarterly meeting of the iron, steel and tinplate trades was held at Birmingham to-day. Prices of tin plates were firm at last week's rates as under, materials being strong all round:—

IC	18¾×14	124 sheets	110 lbs.	13/3 to 13/4½ per box.
IC	19¼×14	120 ,,	110 ,,	13/3 to 13/4½ ,,
IC	20 ×10	225 ,,	156 ,,	18/6 to 18/9 ,,

F.o.b. Wales. Tin lining and iron hooping extra.

We give particulars of the exports of tin plates to various countries for 1903, 1904, and 1905, which allowing for the great falling off in the shipments to Russia, are very satisfactory, and for comparison we give the totals of shipments for each year from 1890 (when the McKinley tariff bill was passed) to 1905.

SHIPMENTS OF TIN PLATES.

	Month ended 31st Dec. 1903. Tons.	Month ended 31st Dec. 1904. Tons.	Month ended 31st Dec. 1905. Tons.	Year ended 31st Dec. 1903. Tons.	Year ended 31st Dec. 1904. Tons.	Year ended 31st Dec. 1905. Tons.
Russia ..	2,778	2,825	12	25,611	30,530	6,393
Germany ..	1,210	1,913	2,067	16,924	20,801	29,706
Netherlands ..	1,914	4,485	2,049	17,073	20,168	26,743
*Belgium ..	—	—	1,284	—	—	8,822
France ..	1,333	1,418	1,345	15,368	14,194	14,229
*Portugal ..	—	—	845	—	—	9,110
U.S.A. ..	4,382	7,567	3,266	50,673	71,862	63,052
B.E. Indies..	3,334	4,160	2,324	32,234	41,491	44,141
Australia ..	1,225	1,002	1,914	11,812	13,303	17,455
Canada ..	828	984	996	23,427	17,062	21,242
Other Countries	9,410	18,289	8,652	99,678	130,223	114,058
Total tons	26,414	42,643	24,754	292,800	359,634	354,951
Total Values—	£340,657	£545,252	£317,773	£3,958,643	£4,595,568	£4,565,640

* Included in "Other Countries" prior to 1905.

Year.	Tons.	Year.	Tons.
1890	421,797	1898	250,953
1891	448,579	1899	256,373
1892	395,449	1900	272,877
1893	379,172	1901	271,320
1894	353,928	1902	311,869
1895	366,120.	1903	292,800
1896	266,963	1904	359,634
1897	271,230	1905	354,951

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6 ,, ,, ,, 6 ,, ,,
7 ,, ,, ,, 12 ,, ,,

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The Petroleum Industrial & Technical Review, Ltd.

SATURDAY, JANUARY 13TH, 1906.

ROUMANIA AND ITS STATE PETROLIFEROUS LANDS.

BY the passing of the bill, which has for its object the proper development of the lands belonging to the Roumanian State, that country enters upon a period of its existence in which the petroleum industry is bound to make rapid and successful headway. The Government has always looked upon the country's growing petroleum industry with a friendly eye, and so it has been with a desire to bring about a greater development of the vast tracts of State petroliferous land, and to obviate the possibility of too large an area being exploited by one firm, that this latest piece of legislation has been passed. To Roumania, its petroleum industry and its proper development is of the greatest importance. Its petroleum fields are vast, the strata prolific, and the general situation of the various territories at once places the country in a most favourable position to engage in a large export trade. Of the oil lands themselves, their extent is, up to the present, unknown, and conflicting opinions exist thereon. For instance, some explorers argue that the richest petroleum region is situated in the south of Roumania, where yet there is not a single productive well, while others contend that there is scarcely any prospect of obtaining oil there in paying quantities. However, the fact remains that the mineral wealth of the country is very great, and all that is needed is the fostering care of the Government, and the infusion of capital in order that the petroleum industry may reach an importance yet undreamt of.

In order that the exploitation of as yet undeveloped lands may be no longer delayed, a most important clause has been embodied in the new law. We are well aware that the general tendency is to concentrate capital and energy upon the development of areas which are known to abound with petroleum, and to leave unexplored that territory, the claims of which in regard to the existence of petroleum, are by no means certain. We have seen the result of this in many countries—in Russia, and especially in America. In the case of the latter, we well recollect the boom which has followed the bringing in of a new field. Derrick after derrick is erected as near the producing well as could possibly be, and in many cases with only a few yards dividing, and in a short time we find quite a town grows up around one particular spot. Slight extensions there are, of course, to the territory, but for the most part, there is always a noticeable lack of enterprise on the part of operators, who as a rule, prefer to work upon one another's heels, as it were, rather than attempt to strike fresh soil.

In the American fields, too, we also see what reward has been in store for those enterprising speculators who have taken a bold move and explored regions hitherto of virgin character. Batson and Humble—both new fields—were encountered by operators more speculating than the rest, while many of the most productive of the remarkably prolific spots in Kansas have been discovered as the result of wild-catting. Thus then we see how essential it is that the drill should not be confined to proven territory, but that it should rather be taken to likely districts other than those at present in operation. The Roumanian Government has not been blind to the desirability of extending the present producing fields, and the opening of fresh regions of supply, and so with a view to remedying what has prevailed in the past, the State lands are now to be divided into plots, each containing as a maximum 100 hectares of land already established as petroleum bearing and 1,000 hectares of unexplored land upon which petroleum may be presumed to exist.

The minimum capital which is requisite ere a concessionnaire can acquire any of the State lands has been fixed at 1,000,000 francs, this having been decided upon in order that development operations may not be retarded by lack of working capital. Should one concessionnaire secure more than one plot of land—though the new law prevents his taking more than three plots—he has in every case to find the necessary £40,000 for the purposes of development, and in the case of the undefined territory, as soon as it becomes oil producing, then one-half of the plot goes back to the State, and the rest necessitates a capital of 1,000,000 francs for every 100 hectares contained in it.

At first sight this perhaps appears a very heavy obligation on the part of the concessionnaire, but upon examining the details of the various governing clauses it is easy to see that the law has been drafted in order to facilitate and not hamper fresh developments.

With regard to the number and the depth of boreholes, the concessionnaire will during his first year have to drill and to work four boreholes, on every plot of 100 hectares of qualified petroliferous land, and it will be obligatory for him to increase the number of drilled and worked boreholes by four every year until the end of the concession.

There are many other important clauses in the new act, which unmistakably prove the attitude of the Government toward the petroleum industry to be of a most friendly nature; and thus, with the opening up of new fields and the development upon a large scale of the present producing territories, it is pretty certain that the fillip now given by the Government will go far to bring the claims of Roumania rapidly to the front, and to increase the importance of the country's petroleum trade.

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LONDON OIL SHARE MARKET.

Friday, Jan. 12th.

Business, although not so active as last week, has contined good, and where dealing has resulted in alterations in price, they have all been in an upward direction.

The fortnightly carry over commenced on Tuesday, when the rates for interest ruled slightly easier than at the last settlement. Making-up figures, on the whole, were very satisfactory, for although improvements were not extensive, the general tenor of the market is decidedly better. Californian Oilfields rose ⅜ at $6\frac{15}{16}$, Russian Ordinary ⅛ at ¾, Schibaieff Ordinary 10½d. at 10s. 3d., Preference ⅛ at 3⅜, Spies 6d. at 7s. 6d., Baku, Ordinary 3d. at 4s., and Preference 1½d. at 7s. On the other hand, Shell Transport fell 1s. per share at 22s. 9d., Russian Preference 6d. at 14s. 6d., while Anglo-Russian at ⅛ was without change.

On Saturday last quotations were as follows:—Anglo-Russians $\frac{3}{32}$-$\frac{5}{32}$, Assam Oil $\frac{3}{16}$-$\frac{5}{16}$, Baku Ordinary 3s. 9d, to 4s. 3d., Preference 7s. 3d. to 7s. 9d., Bibi-Eybats ½-⅝. Debentures 88-93, Californian Oilfields 6¾-7, European Preference $\frac{3}{16}$-$\frac{5}{16}$, Debentures 86-90, Russian Ordinary 14s. 6d. to 15s. 6d., Schibaieff Ordinary 10s. to 10s. 6d. Preference 3⅜-3⅝, Shell Transport Ordinary 22s. 3d. to 22s. 9d., Preference 9-9½, and Spies $\frac{11}{32}$-$\frac{13}{32}$.

Monday's business was noticeable for a rise of ¼ in Schibaieff Preference to 3⅝-3⅞, and on Tuesday Russian Debentures rose to 91-94, and Schibaieff Preferences were a wider market at 3½-4. Since then there has been no alterations, and we give to-day's latest prices on page 28.

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Mr. A. Beeby Thompson, of Messrs. Thompson and Hunter, left London last week on an extended tour to the West Indies and South America, in which latter country he will inspect the property of one of the companies for whom his firm act as technical advisers.

THE ANGLICIA PETROLEUM COMPANY, LIMITED.

ANNUAL MEETING.

The annual meeting of the shareholders of the above company took place at Winchester House on Thursday, at noon, Mr. Alfred R. Holland presiding.

The report of the directors was as under:—

The directors regret the delay in rendering the balance sheet and profit and loss account, but this is largely due to the complicated nature of the accounts in connection with the transfer of its property by the Anglo-Galician Oil Co., Ltd. (in liquidation), to the Galizische Naphtha Aktiengesellschaft "Galicia," referred to in the previous report, the final adjustment of which took up considerable time.

The requisite formalities relating to the transfer of the property have recently been completed, and the "Galicia" Co. came into possession as from the 1st December, 1904.

View of the Distilleries at the Company's Refinery.

	£	s.	d.
For the year ended the 30th April last this Company has received from the "Galicia" by way of interest, commission and dividend, the sum of	16,406	13	9
Add the amount brought forward from last year	1,978	1	4
Transfer fees	2	4	6
	18,386	19	7
Deduct therefrom the London administration and sundry charges, amounting to	4,245	9	5
There remains a net profit of	£14,141	10	2

Which the directors recommend should be dealt with as follows:—

	£	s.	d.
To write off a further one-fifth proportion of the preliminary expenses	1,980	0	0
To pay a dividend of 7 per cent. for the year on the first preference shares	7,559	7	5
To carry forward the balance of ..	4,602	2	9
	£14,141	10	2

The directors had hoped that the receipts from the "Galicia" Co. would have been larger; but unfortunately the results of the Boryslaw drilling were not so satisfactory as expected, and the working of "Petrolea" (the crude oil organisation) and "Olex" (the export organisation) have effected the company less favourably than was anticipated. The directors could, therefore, only approve the adoption of a conservative course in dealing with the drilling expenses.

Schodnica.—The output has been fairly maintained by cleaning and deepening the shafts where necessary, and amounts to about 33 tons a day. The expenses have now been reduced to the lowest possible limit.

Fair progress has been made with the deep shaft now being sunk on joint account near the company's boundary; it has reached a depth of about 740 metres, but at present it is not possible to state what the ultimate result may be.

Boryslaw.—Three of the company's deep shafts came into production about the beginning of 1905. Two of them are still yielding, but the quantity is now considerably less than it was, and is gradually decreasing. As the third shaft, after yielding some 3,000 tons, ceased to produce, it is now being deepened, and the local management still hope for an additional production at a greater depth.

Four other shafts at Boryslaw have reached depths varying from 940 to nearly 1,100 metres. They have already produced small quantities, and hopes are entertained that they will shortly come into production, as also several other shafts on the company's Boryslaw property.

Tustanowice.—In view of the good oil-bearing prospects in this district, which adjoins Boryslaw, additional land has been purchased. Various wells in the neighbourhood have recently come into production, thus materially increasing the value of this acquisition.

Refinery.—The directors are glad to report that the refinery has worked satisfactorily. The various manufactures of the company have sold freely, and the demand for the company's goods shews a steady increase. With the view of more profitably dealing with the large amount of residues, a lubricating oil plant has been added to the refinery. Good sales of this product have already been effected, and satisfactory results from the future trade are to be expected.

In accordance with the articles of association, Mr. A. R. Holland retires, and, being eligible, offers himself for re-election.

The auditors, Messrs. Price, Waterhouse and Co., also retire in accordance with the articles of association, and offer themselves for re-election.

Application has been made to the committee of the Stock Exchange for a quotation of the company's shares, and, in order to comply with their requirements, certain alterations in the articles of association, Nos. 72 and 104, are necessary. A resolution effecting such alterations will be proposed in accordance with the notice on the back hereof.

The Chairman, in moving the adoption of the report and balance sheet, said he desired to express the regret of his colleagues and himself that the result of the accounts was not more satisfactory. There were certain reasons which had militated against their profit. In the first place, the production during the period covered by the accounts from their property at Boryslaw had not been, or, rather, was not, nearly as large as they were hoping it would be. It amounted, in fact, to only some 5,500 tons, and the result was that they were compelled to purchase from the Crude Oil Administration, or, rather, organisation, known as Petrolea, a considerable quantity of petroleum for the refinery, and that at rather high prices. The speaker then proceeded: While I am on the subject of Petrolea I should like to add that we originally decided to join this organisation; we could see it would certainly be to the advantage of this company and of our shareholders; but as time went on various alterations were made in connection with Petrolea, and we found that our association with Petrolea was of such an onerous nature to this company that we a short time ago authorised our representatives to give formal notice to Petrolea of our desire to terminate the existing arrangement, and this course has been adopted. The prices we obtained for the inland petroleum—that is to say, the petroleum sold in Austria-Hungary—were altogether satisfactory; but, unfortunately, so many refineries are now included in the cartel that our allotment under the cartel was materially reduced, and so our profit was diminished in like proportion. With regard to the large amount we suggest should be carried forward, doubtless some of the shareholders rather thought that it should have formed the basis for a dividend on the second preference capital, if only a small one. This matter received the very careful attention of your board; but, bearing in mind the great need of this company for liquid cash to carry on its business, we decided, in the general interests of all concerned, that it would be far wiser to carry this amount forward, instead of distributing a portion of it; and in this matter we sincerely hope that we shall receive the hearty support of the various shareholders.

The position with reference to the Austrian oil industry is the following:—The production of crude oil during the last few years has so materially increased that it is quite impossible for the home trade to deal with it, and it is therefore absolutely necessary that not only an export business, but a well-organised and large export business, should be organised. This is now being done, and with considerable success; but, owing to the very large amount of competition one meets with in neighbouring foreign markets, the results of this export business up to the present have not been very remunerative. With regard to the company's property at Schodnica, the production amounts to a little over 30 tons a day. It has slightly diminished since last year, but not, fortunately, to any very great extent. The production is being maintained, as far as possible, by judicious cleaning and deepening, and our expenses in connection with the carrying on of the Schodnica oilfields have now been reduced to the lowest possible figure. Our main boring operations used to be directed from Schodnica, but for some time past our more extensive office staff has been transferred to Boryslaw, and with the very best results. As you know, we have decided to contribute to a small extent to the cost of sinking a test shaft, and this shaft is now being carried down in a position close to the company's boundaries at Schodnica. This shaft has now reached some 750 metres in depth, and, although at various stages a certain amount of oil has been met with, I should not like at the present moment to pronounce any definite opinion as to whether it is going to be successful or not; but, should it be successful, I need hardly point out to shareholders what a very material improvement it will make to the position of our property at Schodnica. I am sorry to say, with reference to Boryslaw, that the very bright anticipations which were originally formed of this property have not, up to the present, been fully realised; but from these remarks I should not like you to think we look upon Boryslaw as a failure—very far from it. We have had to drill considerably deeper to reach the oil than was originally anticipated, and, in addition to that, the shafts, after coming into production, have not continued to yield such abundant quantities as we certainly hoped they would do. Our production from May 1 to December 31st, 1905, amounted to some 15,500 tons, and this from four shafts. Our present production varies from 50 tons to 65 tons a day, or, in other words, is more than double what our present production is at Schodnica.

Adjoining the Boryslaw district is a fairly large territory known as Tustanowice. After very carefully studying this territory when we were on the spot, and also after receiving the very strong recommendations of our Austrian representatives, we did not hesitate to authorise the purchase of various plots of land in that district, and I am glad to say that since then the favourable anticipations which were originally formed of that territory have been fully fulfilled; so that the land purchased has considerably risen in value. In speaking of the refinery at Drohobyez, I should like to say that I look upon it as one of the brightest spots, if not the brightest spot, of the whole of the business of this company. Our refinery, as you know, has been entirely rebuilt; it has been equipped with the very best and up-to-date plant and machinery, and I am glad to say the results have more than warranted the expenditure which has been made on it. My colleague, Mr. Sinclair, and myself visited your refinery, and also your oil fields in June last, snd we were exceedingly pleased with all we saw. Our chief employés seem to have their heart in the business, and to be conscientiously doing the very best they can to help forward the general interests of this company. I now beg formally to move: "That the directors' report and accounts to April 30th, 1905, submitted to this meeting, be, and the same are hereby, approved and adopted, and that a dividend at the rate of 7 per cent. per annum on the first preference shares be, and the same is hereby, declared."

Mr. Charles Lock seconded the motion.

In reply to Mr. E. E. Head, the Chairman said the company's total production for the twelve months ended April 30th, 1905, might be taken roughly at 17,500 tons, and the production from May 1st last to December 31st was from Boryslaw 15,500 tons, and from Schodnica 7,000 tons, or a total of 22,500 tons. With reference to that production, speaking generally, it had been all used up in the refinery.

The motion was unanimously agreed to.

The retiring director (Mr. Holland) was re-elected, and Messrs. Price, Waterhouse and Co. were re-appointed auditors.

THE LATEST VIEW OF THE BUSTENARI OIL FIELD.

The above photograph of the Bustenari oil field was taken by Mr. Campbell M. Hunter, (Messrs. Thompson and Hunter) who recently made a tour through the Roumanian oil fields. Mr. Hunter was fortunate in having every assistance afforded him for visiting the various oil-producing districts, as well as seeing some of the wells that were being drilled by the Romano-American Co. with the Pennsylvania cable rig. These latter possessed exceptional interest, owing to the scathing criticism that has been passed on them by local drillers, who are unwilling to recognise that the cable rig can possess any great advantage over their improved Canadian pole tool system. The reason for the lack of success in the early wells was probably as much due to the lack of appreciation on the part of the American drillers of local conditions and methods, as to their disinclination to use under-reamers and leave off relying on driving their casing. It will be interesting to see whether, when the drillers become thoroughly accustomed to under-reaming and have added a calf-wheel to their rig, they will not be able to shew as good, if not better, results with the cable system, as the local drillers can with their Canadian pole tools.

IMPROVEMENTS in DEVICES for VAPOURISING LIQUIDS.

A patent has recently been granted to Mr. Albert Hayes, of 171, West 71st Street, New York, county of New York, relative to an improvement in devices for the vapourising of liquids. The invention is particularly intended for vapourising hydrocarbon oils in order to form a combustible gaseous compound suitable for use in explosion engines or for other purposes, and it is designed to overcome certain difficulties which have heretofore been found in the use of the heavier hydrocarbons as the basis for forming gaseous mixtures suitable for use as the explosive charge for explosion engines. It is common to make use of the lighter or more volatile hydrocarbons, such as gasolene or naphtha, as the basis of the explosive charge and the so-called gasolene engines are successfully and extensively used. The desirability of using a heavier and less dangerous hydrocarbon as the basis of the charge has been generally recognised, and much time and effort have been expended in the attempt to satisfactorily vapourise the heavier hydrocarbons for this purpose. These attempts have been so far unsuccessful that the engines employing kerosene or other heavy hydrocarbon as the basis of the explosive charge have not gone into extensive use. The difficulties in the use of the heavier hydrocarbons as the basis of the explosive charge appear, says the inventor of this new patent, to be due to the difficulty of properly vapourising the oil without either vapourising in a retort, which requires high heat and the use of a discharge orifice of such size that it is liable to clog, or vapourising by spraying or otherwise finely dividing the oil, which is liable to result in an excess of the hydrocarbon, and consequent deposit of carbon in the engine cylinder. These difficulties are overcome in the device of the present invention by the use of a construction which permits the air employed to take up only the proportion of oil necessary to make a satisfactory explosive charge.

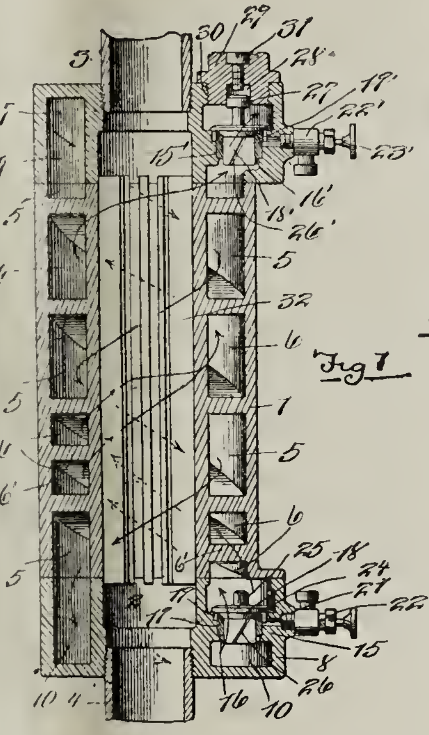

Fig 1

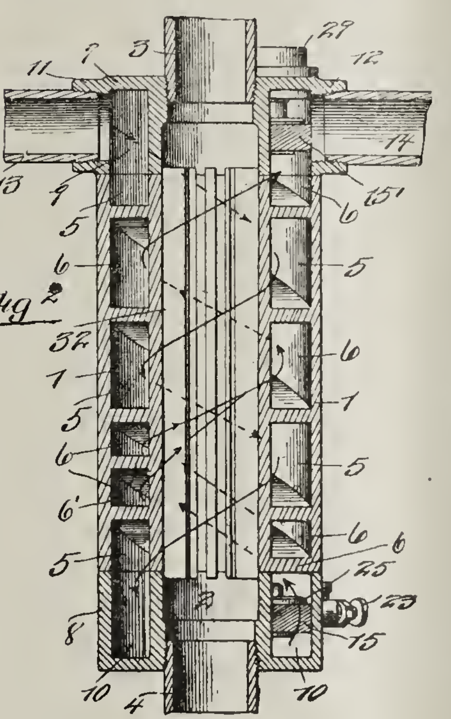

Fig 2

The device is preferably so arranged that the air is first heated, and is then caused to take up a slight quantity of oil and a slight quantity of water, the air carrying the oil and the water being then reheated and again caused to take up a further amount of oil, and it is essential to the operation of the device that the oil be presented in the form of a film to the air current, so that it will be impossible for more than the desired amount to be taken up.

With the above explained purposes in view, the invention consists in the construction and combination of elements hereinafter described and particularly pointed out in the claims.

In the sketch herewith reproduced, 1 is a casing preferably, though not necessarily, cylindrical in cross section, having a passage 2 through it from end to end, communicating at one end through pipe 3 with the exhaust of an explosion engine or other source of heated gases, and having a discharge pipe 4 connected with its other end. Between the wall of the passage 2 and the outer wall of the casing 1 is formed a pair of passages 5 and 6, preferably spiral, the lower portions of the passage 6 being preferably divided by the partition 6^1 into two parallel passages. The casing 1 is provided at its ends with heads 7 and 8, having passages 9 and 10, respectively, communicating with the spiral passages 5 and 6 as hereinafter explained. The passages 5 and 6 in the casing with the passages 9 and 10 in the heads, form, taken together, a continuous passage or air conduit leading from the upper head downward through the walls of the casing about the passage 2 to the lower head and thence upward through the walls of the casing about the passage 2 to the upper head. The head 7 is provided preferably at points about diametrically opposite each other, with openings 11 and 12, of which the opening 11 serves as an inlet opening for the admission of air, and the opening 12 serves as an outlet for the gas formed in the device as hereinafter described. Pipes 13 and 14 are connected respectively with the openings 11 and 12, the pipe 13 leading from a suitable supply of air under pressure of preferably about ten pounds, and the pipe 14 leading to the cylinder of the engine or the receptacle in which the gas is to be stored.

In case the device is to be used in connection with a four-stroke cycle engine, it will not be necessary to supply air under pressure to the air inlet 11, as the down stroke of the piston by its suction will create a current of air sufficient for the proper operation of the device.

The casing 1 is preferably, though not necessarily, arranged vertically, as shewn, so that the head 7 will be at its upper end, and the head 8 at its lower end. The lower head 8, by its passage 10, serves to connect the lower ends of the spiral passages 5 and 6. In the passage 10 is a diaphragm 15 having two openings 16 through it, the diaphragm being so arranged that all communication between the ends of the passages 5 and 6, is necessarily through the openings 16.

The openings 16 are alike, and only one of them need be described.

Each is provided with a valve seat 17, formed integrally with the diaphragm or preferably, as shewn, by a ring set into the opening 16. This valve sheet is tapered, as shewn, to form a seat for a conical or tapering valve 18. Surrounding the valve seat is a groove or well 19, which communicates with the face of the valve seat by means of small holes 20, preferably four in number, though the number may be varied. The groove or well 19 communicates by an inlet 21 with a supply pipe 22, the inlet being controlled by a suitable valve 23. Through one of the supply pipes 22 oil is supplied to one of the grooves or wells 19, and through the other supply pipe 22 water is supplied to the other of the grooves or wells 19, the oil or water, as the case may be, passing from the groove or well through the holes 20 to the face of the valve seat when the valve is lifted.

The upper head 7 is provided with a diaphragm 15^1, which as in the case of the diaphragm in the lower head, is provided with one or more openings 16^1, each provided with a valve 18^1, groove or well 19^1, supply pipe 22^1 and valve 23^1, the construction being in all respects the same as in the case of the corresponding valves in the lower head, with the exception that the valves of the upper head are preferably provided with means for regulating their movement. For this purpose, in the construction shewn, the valves 18^1 are each provided with a head 27 concentric with the valve, and adapted to enter a cylindrical opening 28 formed in a plug 29 inserted in an opening 30 directly above the valve 18^1, and an adjusting screw 31 extends through the upper end of the plug so the upper end of the head 27 will strike its lower end when the valve is raised.

The valves 18 and 18^{1} are respectively provided with tapered or conical faces 24 and 24^{1}, adapted to fit the valve seats 17 and 17^{1}, and above the faces 24 and 24^{1} have respectively flanges 25 and 25^{1}, adapted to extend over and form covers for the grooves or wells 19 and 19^{1}. In the operation of the device, the several pipes 22 and 22^{1} are connected to suitable reservoirs or other supplies of oil or water, as the case may be, one of the pipes 22 of the lower head being connected with a water supply, and the other with an oil supply, and the pipes 22^{1} of the upper head being preferably both, if two are used, connected with an oil supply. It is not necessary for the oil or the water to be supplied under pressure, it being necessary only for the oil or water to flow in with sufficient rapidity to keep the grooves or wells 19 full, or nearly so.

Air under pressure of preferably about ten pounds, enters through the air inlet 11, and passing downward through the spiral passage 5, is heated by contact with the walls of the casing, which are kept hot by the exhaust from the engine passing through passage 2. From the passage 5 the heated air enters the passage 10 of the lower head 8, and by its pressure causes the valves 18 of the lower head to lift slightly, and at the same time, by the action of the air current on the wings or valves 26, gives the valve a slight rotation to distribute the oil or water, which, as the valve lifts, is free to pass through the holes 20 from the groove or well 19. The effect of this rotation is to spread the oil or water in a thin film, in which form it is readily taken up by the air current in its passage through the valve. The currents of air from the two valves of the lower head, one carrying the oil so picked up, and the other carrying water, enter respectively the passages into which the lower portion of the spiral passage 6 is divided by the passage 6^{1}, and at the point where these passages unite mix together; the mixture of air, oil and water is subjected to the heat of the walls of the passage, by which the vapourisation of the oil and water is made complete, and the gaseous mixture more or less completely fixed. The heated gas then passes into the upper head 7, and, passing through the openings 16^{1} of the diaphragm 15^{1} controlled by the valves 18^{1}, takes up a further quantity of oil, and then passes through the outlet 12 to the cylinder of the engine. The flanges 25 and 25^{1} of the valves 18 and 18^{1} serve to protect the grooves or wells 19 and 19^{1}, while the valves are closed from any back pressure of the gas which might tend to prevent the oil or water from flowing into the groove or well, and, while the valves are raised, leave the grooves or wells open for more or less oil or water to be taken up from the surface of the oil or water in the groove or well.

The proportion of oil and water thus taken up by the air is comparatively slight, and no further admixture of air is needed to make an explosive charge suitable for use. If desired, the gaseous mixture as it is discharged from the outlet 12 may be subjected to compression to form a practically stable gas suitable for general use, it being necessary only that the compression be intermittent, so that the flow from the outlet 12 will be intermittent and the valves 18 will open and close intermittently.

The device is adapted to be connected with any explosion engine, and is adapted to use, for the purpose of forming an explosive charge, any liquid hydrocarbon from gasolene or naphtha to the heaviest oils, such as crude oil or fuel oil, it being necessary only that the oil used be sufficiently fluid to flow into the grooves or wells 19 and keep them full, or nearly so.

If desired, different oils may be used to supply the grooves or wells of the valves of the upper and lower head, or, if two valves are used in the upper head, one may be supplied with heavy oil and the other with gasolene or other more volatile hydrocarbon.

By means of the device any gasolene engine may, without change other than the substitution of the device for the vapouriser or carburetter commonly used, be adapted to run with kerosene, or even fuel oil or crude oil.

AMERICAN PETROLEUM IN SPAIN.

Consul-General Ridgely, of Barcelona, has forwarded to the United States a comprehensive report on the trade of Spain during the past year. From this report the following extracts relating to the trade in petroleum with that country are taken:—Only about 1,000 barrels of American lubricating oil are sold annually in Barcelona. But for the discriminating tariff, this figure for Barcelona alone could easily be increased to 12,000 barrels. There is a strong feeling here in favour of American oil, and only the tariff keeps it from outselling all others. It is conceded to be the best, and as the quality of the machinery here improves, the demand for a better class of lubricating oil increases accordingly. Importers interested in this trade sincerely hope that any new treaty between Spain and the United States will take this question into consideration. The duty on American oil is 60 pesetas (about $9) per 100 kilogrammes (220 pounds), while on oils from other countries it is but 50 pesetas per 100 kilogrammes. Of the 1,200 barrels of American lubricating oil sold here, the greater part comes from jobbers at Antwerp or Hamburg, and the oil is not even entered as American, but as Belgian or German.

The first cargo of petroleum that ever reached this port in a sailing vessel from the United States arrived in July of last year from Philadelphia. The oil was carried in tanks, and the barque, which was of French nationality, made a very good and quick voyage. Only part of the oil was for this port, the remainder being consigned to Marseilles, whence the vessel arrived in due time. It is understood that this method of transporting petroleum may be more generally adopted than it has ever been before, the sailing vessel being considerably cheaper than the tank steamer.

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PETROLEUM AND MALAY STATES.

The Board of Trade has received, through the Colonial Office, a copy of a notification, dated 1st September, 1905, amending the "rules" made on the 13th September, 1904, under the petroleum enactment of 1897, affecting the importation, storage, etc., of petroleum in Perak. The "rules" at present laid down provide that no licence shall be required for the importation, transport or storage, by any person, of dangerous petroleum intended for whatever use, not exceeding five (instead of three as heretofore) gallons in quantity, provided such petroleum is placed in suitable metal vessels distinctly labelled, and is securely stopped. Rules are also enacted for the transport of petroleum by rail, car, boat, or coolies, in drums of not more than 40 gallons capacity each, but of not more than 70 gallons capacity each, of a make and strength which have been approved by the Resident after such examination and tests as he may consider necessary.

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The Roumanian Government has submitted to the Chamber a credit of 600,000 francs for creating a geological institute, in which petroleum geology will have a foremost place.

The American Oil Market.

New York, Week ended Dec. 30th.

About an average number of completions were reported from the older petroleum producing districts during the past week, but the percentage of dry holes was somewhat larger than during the preceding weeks. Among the producing wells, however, there were more good wells, and the average probably shews no decrease. The wells which could not be classed among the large wells or the failures were small pumpers, there being very few ranging between the latter class and the large wells. The best wells brought in during the week were in Ohio and Pennsylvania, while the results in West Virginia have been very discouraging, and as the season for bad roads has set in this is an obstacle that increases the cost of getting materials to the fields. Development work in that State is falling off, and in some districts operators are closing up their work for the winter, the chances for profit making being regarded as very slim owing to increased cost of development work and the poor results which must be expected. The outlook is, therefore, that the productions of the higher grades of oil will decrease more rapidly during the next three months. The efforts to find new producing territory almost uniformly ends in failure, says the *Oil, Paint and Drug Reporter*, and pushing on in advance of developments only tends to increase the number of dry holes, with an occasional edge well shewing no better than the average of the contiguous field. In the Kansas and Territories fields the runs average about 50,000 barrels a day, and the shipments have increased to about 20,000 barrels a day, so that the additions to the stocks shew a steady decrease, although there has been a steady increase of facilities for storage and shipment the production has also increased and unless there is a check put on development work the producers in that section cannot hope for improvement in the conditions which have beset them. Development work is being prosecuted with vigour, especially in the Humble field, and some good producers have been reported.

Refined and Products.—The demand for refined for export has been active during the past week, there having been a larger number of tank vessels on this side, and the shipments from Philadelphia have been unusually heavy. There has been no change in the conditions in the principal foreign markets, and the declining tendency in prices appears to have been checked. The conditions in Russia are very puzzling, the reports being one day to the effect that the Government is gaining the upper hand and that the revolt will soon be ended, only to be followed the next by reports of fresh outbreaks and an extension of the revolutionary spirit, while in reports of conflicts both sides claim victories. The engagements during the past week aggregate about 300,000 barrels, all for shipment in bulk.

The price for barreled oil has remained steady at 7·60 for New York loading, and at 7·55c. for Philadelphia loading. The principal foreign markets are easier. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. od. @ 3s. od. to Continental ports, as to port and vessel.

Cases for export have been in light request, and sales of about 150,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in fair request, and sales of about 30,000 barrels are reported. Pennsylvania crude is quoted at 7·60c. in barrels.

Crude naphtha continues steady. For export, sales of about 5,000 barrels have been reported.

CLOSING QUOTATIONS.

Crude.		Week ended Dec. 23. 1905	Dec. 30. 1905.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4·70	4·70
Residuum, bbls for export	.. ..	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were:—

	Week ended Dec. 23. 1904.	Dec. 23. 1905.
Tiona	1·65	1·68
Pennsylvania	1·50	1·58
North Lima	1·01	0·94
South Lima	0·96	0·89
Indiana	0·	0·89
Canadian Oil :		
Petrolia	1·53	1.34

Refined—For Export.

		Week ended Dec. 23.	Dec. 30.
Cargo Lots for export..	per gal. ..	7·60	7·60
In bulk	..	4·70	4·70
Philadelphia loading ..	.. ..	7·55	7·55

Refined in Cases—110 Fire Test.

	Week ending Dec. 23.	Dec. 30.
5,000 to 10,000	10·35	10·35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended Dec. 23.	Dec. 30.
120 fire test, S.W. ..	per gal...	12	12
130 fire test, S.W. ..	.. ..	12½	12½
150 fire test, W.W. ..	.. ..	13	13
In bulk from tanks	.. ..	10	10
300 fire test	.. ..	12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ending Dec. 23.	Dec. 30.
Naphtha, crude, car. lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	17	17

Pennsylvania Oil Runs from Dec. 22nd to Dec. 27th were:—Dec 22nd, 89,129; Dec. 23rd and 24th, 62,279; Dec. 25th, 38,104; Dec. 26th, 70,026; Dec. 27th, 63,427 For the month of Nov., 2,169,468.

The Deliveries of Pennsylvania Oil for the same dates were:—79,717; 87,941; 62,426; 98,146; 92,432; For the month of Nov., 2,616,001.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended Dec. 29 and from Jan. 1, were as follows:—

	Week.	Year.	1904.
Refined, barrels and bulk	317,000	12,370,800	10,696,800
Refined, cases	160,000	19,604,000	16,851,000
Crude, barrels and bulk..	32,900	2,361,300	1,260,500
Crude, cases	25,000	313,000	334,000
Naphtha, barrels.. ..	200	531,900	302,500
Residuum, barrels ..	54,000	838,000	469,200
Lubricating, barrels ..	10,900	254,000	118,000
Total, barrels cde. eq. ..	643,095	26,620,846	22,931,500

Clearances for the Week.

During the week ended Dec. 29th, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1904.
Refined	6,181,450	493,764,871	431,223,200
Crude	—	1,085,574	743,181
Naphtha	20,860	11,964,575	8,703,879
Residuum	—	3,294,515	10,653,528

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Dec. 29th ..	8,241,933
Total from New York, from Jan. 1, 1905 ..	660,038,738
Same period last year	575,223,256
Increase	84,815,482
From United States, week ended Dec. 29th ..	24,131,738
Total from United States, since Jan. 1, 1905	1,247,389,092
Same period last year	1,091,867,046
Increase	155,522,046

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The "Review" Shipping List.

Jan. 11, 1906.

Specially Prepared for this Journal.

Note.—Except when otherwise stated the Vessels are Steamers.

(*The following abbreviations are used in this table:*—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	For.	From.	Latest Date and Position.
ALICE ISABELLE	Philadelphia	Sables d'Olonne	Arr. Jan. 8
ALCHYMIST	London	Shoreham	Arr. Jan. 6
AMERICAN	Antwerp	New York	Arr. Jan. 5
APPALACHEE	Shanghai	SanFrancisco	Arr. Dec. 15
APSCHERON	Antwerp and Rouen	Batoum	P. Tarifa, Jan. 4
ARAL	Philadelphia	Dover	P. Scilly, Jan. 8
ARAS	Newport	Batoum	P. Barry Island, Jan. 9
ARGYLL	Astoria	Port Harford	Arr. Dec. 22
ASTRAKHAN	Philadelphia	Dover	P. Reedy Island, Dec. 28
AUGUST KORFF	New York	Hamburg	Arr. Dec. 30
AUREOLE	Barry	New York	P. Barry Island, Jan. 5
BAKU STANDARD	Rouen	Batoum	L. Const'iple, Jan. 5
BALAKANI	Manchester	Port Arthur (Texas)	L. Queenstown, Dec. 29
BATOUM	Tyne	Philadelphia	P. Dunnet Head, Dec. 25
BAYONNE	New York	Malta and Venice	Arr. Malta, Jan. 7
BEACON LIGHT	Penarth	Philadelphia	Arr. Jan. 6
BEME	Bombay	Rangoon	L. Dec. 7
BLOOMFIELD	Marcus Hook	Rouen	L. Dec. 29
BORJOM	Batoum	Odessa	L. Sept. 18
BRILLIANT	New York	Stettin	Arr. Jan. 8
BROADMAYNE	Tyne	Philadelphia	Arr. Jan. 10
BULLMOUTH	Kobe	Yokohama	Arr. Jan. 7
BULYSSES	Kustendje	Dover	P. Gibraltar, Jan. 9
BURGERMEISTER PETERSEN	Philadelphia	London	Arr. Jan. 10
CADAGUA	—	—	In port, Bilbao, Dec. 26
CALCUTTA (Br. bq.)	Newcastle (N.S.W).	SanFrancisco	L. Dec. 4
CARDIUM	BalekPappan		L. Jan. 8
CAUCASIAN	Batoum	London	Arr. Jan. 8
CHARLOIS	Philadelphia	Antwerp	Arr. Jan. 7
CHESAPEAKE	Manchester	New York	Put back Liverpool, Jan. 2
CHESTER	Antwerp	New York	P. Prawle Pt., Dec. 31
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Singapore	—	L. Balek Pappan, Jan. 3
COL. E. L. DRAKE	New York	Galveston	L. Oct. 25
COWRIE	Dunkirk	Cardiff	P. Barry, Jan. 10
CYMBELINE	Port Talbot	Philadelphia	P. Old Head of Kinsale, Jan. 7
CZAR NICOLAI II.	Hamburg	Batoum	L. Const'ple, Dec. 30
DAGHESTAN	Antwerp	Philadelphia	Arr. Jan. 9
DAKOTAH	SanFrancisco	Shanghai	L. Nov. 24
DELAWARE	Cardiff	New York	L. Barry, Jan. 10
DEUTSCHLAND	Hamburg	New York	L. Jan. 3
DIAMANT	Philadelphia	Savona	L. Jan. 7
ELAX	Calcutta	—	At Singapore, Jan. 8
ELISE MARIE	Philadelphia	London	Arr. Jan. 9
ENERGIE	Tyne	Philadelphia	L. Dec. 26
ERIVAN	Antwerp	Swansea	P. Prawle Pt., Jan. 10
EUPLECTELA	Hamburg	New York	Arr. Jan. 8
EXCELSIOR	Philadelphia	Dublin	P. Del. Break., Dec. 29
EZIO	—	—	Coasting Peru
FRANCE MARIE	Marcus Hook	Barcelona	Arr. Dec. 6
GEESTEMUNDE	Hamburg and Tyne	Philadelphia	Arr. Jan. 7
GENESSE	Manchester	Philadelphia	P. Fastnet, Jan. 4

Vessel.	From.	For.	Latest Date and Position.
GEORGIAN PRINCE	Rouen	Tyne	Arr. Dec. 6
GOLDMOUTH	Soesoe	—	L. Dec. 21
GRAF STROGANOF	Cronstadt	Odessa	In Tyne, Jan. 10
GUT HEIL	Pillau	Baltimore	P. Dover, Dec. 28
HAINAUT (Dch.shp.)	Antwerp	Alexandria	Arr. Jan. 6
HARRY WADSWORTH	Middlesbro'	Port Arthur (Texas)	P. Dungeness, Dec. 21
HELIOS	Fiume	Constant'ple	L. Jan. 6
HOTHAM NEWTON	Port Arthur (Texas)	U. Kingdom	Cd. Norfolk, Dec. 29
HOUSATONIC	Bombay	Newcastle	L. Dec. 16
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Barcelona	Taganrog	L. Jan. 3
J. B. AUG. KESSLER	Sumatra	New York	Arr. Dec. 31
JAMES BRAND	Bordeaux	Tyne	Arr. Dec. 31
KURA	Tyne	Trieste	P. Oitavos, Jan. 6
LA CAMPINE	New York	Antwerp	Arr. Flushing, Jan. 10
LA FLANDRE	Tyne	Philadelphia	Arr. Jan. 9
LA HESBAYE	Antwerp	Philadelphia	At New York, Jan. 7
LA MADALEINE	Cardiff	Marseilles	P. Barry Island, Jan. 5
LA VIGUESA	Marcus Hook	Vigo	Arr. Nov. 6
LACKAWANNA	Tyne	New York	Arr. Jan. 7
LE COQ	Philadelphia	Cette	Arr. Fayal, Jan. 6
LOUTSCH	Barcelona	Novorossisk	L. Const'n'ple, Sept. 5
LUCERNA	Batoum and London	Manchester	Arr. Dec. 20
LUCIFER	Rouen	Newport	Arr. Dec. 1
LUCIGEN	Avonmouth	Port Talbot	Arr. Jan. 7
LUCILINE	Rouen	Kustendje	L. Const'ple, Dec. 28
LUMEN	Philadelphia	Bergen	P. Butt of Lewis, Jan. 3
LUX	Blaye	—	P. Nantucket, Jan. 9
MAKKAVEI	Batoum	Odessa	L. Nov. 13
MANHATTAN	Antwerp	New Orleans	Arr. Sand Key, Jan. 9
MANNHEIM	Philadelphia	Copenhagen	Arr. Jan. 7
MARGARETHA	Batoum	London	L. Consti'ple, Jan. 3
MEXICAN PRINCE	Rouen	Tyne	Arr. Dec. 1
MIRA	Manchester	Philadelphia	Sp. Jan. 4, 51 N., 11 W.
MUREX	Samboe	—	L. Dec. 31
NARRAGANSETT	London	New York	L. Jan. 10
NERITE	Penang	Singapore	Arr. Jan. 5
NEW YORK	New York	Rotterdam	Arr. Jan. 5
OCEAN	Philadelphia	Amsterdam	Arr. Jan. 7
ORANJE PRINCE	Vallo	Tyne	Arr. Dec. 31
ORIFLAMME	Marseilles	Philadelphia	P. Cape Spartel, Jan. 10
OSCEOLA	Savannah	Hamburg	Arr. Jan. 2
OTTAWA	Galveston	Tampico	Arr. Dec. 17
OURAL	Tyne	Philadelphia	P. Beachy Head, Dec. 25
PALEMBANG	Batavia	—	L. Oct. 4
PAULA	Danzig	Philadelphia	P. Dunnet Head, Jan. 5
PECTAN	Emden	New Orleans	Arr. Dec. 12
PENNOIL	Philadelphia	Dover	At St. Michael's, Jan. 2
PERLAK	Shanghai	Hankow	L. Nov. 28
PETROLEUM	—	Gibraltar	Arr. Dec. 18
PHOEBUS	New York	Hamburg	Arr. Jan. 7
PINNA	Manchester	Philadelphia	L. Liverpool, Jan. 3
POTOMAC	Philadelphia	Liverpool	Arr. Jan. 5
PROMETHEUS	Clyde	Brisbane	Arr. Jan. 1

Vessel.	From.	For.	Latest Date and Position.
PRUDENTIA	Sulina	Rouen	P. Oitavos, Jan. 9
RION	Penarth	Novorossisk	L. Constanti'ple, Jan. 5
ROCK LIGHT	Rotterdam	Port Arthur (Texas)	P. Beachy Head, Dec. 22
ROSSIJA	Hamburg	Novorossisk	Cl. Const'iple, Jan. 3
ROTTERDAM	New York	Rotterdam	Arr. Dec. 31
RUSSIAN PRINCE	Liverpool	Havana	L. Dec. 27
SALAHADJI	Singapore	Sanga Sanga	L. Sept. 10
SEMINOLE	Philadelphia	Calcutta	P. Reedy Island, Dec. 23
SILVERLIP	Port Arthur (Texas)	Dover	Put back, St. Michaels, Jan. 5
SINGU	Rangoon	Bombay and Kurrachee	L. Dec. 11
SNOWFLAKE	Philadelphia	Southampton	P. No-Man's Fort Jan. 10
SOPHIE	Novorossisk	Trieste	Arr. Dec. 31
SPONDILUS	Singapore	Dover	P. Las Palmas, Jan. 10
STANDARD	Philadelphia	Stettin	Arr. Dec. 24
STROMBUS	Tyne	Singapore	P. Soesoe, Jan. 7
SURAM	Penarth	Batoum	P. Gibraltar, Dec. 29
SUWANEE	Hull	Philadelphia	Arr. Jan. 9
SVIET	Alexandria	Odessa	Arr. Dec. 17
TELENA	Cardiff	Singapore	Arr. Suez, Jan. 7
TEREK	Savona	Batoum	Cl. Constant'ple, Jan. 1
TIFLIS	Hamburg	Tyne	Arr. Jan. 9
TIOGA	Batoum	Liverpool	Arr. Nov. 25
TONAWANDA	Manchester	New York	L. Jan. 5
TROCAS	Hong Kong	—	L. Jan. 6
TURBO	London	Port Arthur (Texas)	Off I. of W., Jan. 3
TUSCARORA	Calcutta	Boston	P. Malta, Jan. 7
TWINGONE	Calcutta	Rangoon	L. Dec. 12
VEDRA	Philadelphia	Venice	P. Del. Break, Dec. 20
VILLE DE DOUAI	Kustendje	Calais	Arr. Jan. 9
VILLE DE DIEPPE	Dieppe	Philadelphia	Arr. Jan. 7
VOLUTE	Shanghai	—	L. Jan. 7
WEEHAWKEN	London	Sumatra	L. Dec. 30
WILLKOMMEN	New York	Weser	L. Dec. 30
WINNEBAGO (Late KINSMAN)	San Francisco	Shanghai	Arr. Jan. 3

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

January 12th, 1906.

Importers have again reduced the price of petroleum ⅜d. all round. The market may be described as very weak, and the lowest quotations are:—

Russian, 5¾d.; American, 6⅜d.; Water White, 7¾d., Roumanian, 5¾d.

LUBRICATING OILS.

are unchanged as follows:—

American pale, £7 5s. to £8 15s.
American dark cylinder, from £7 10s.
American filtered cylinder, from £10 12s. 6d.
Shellene, £5.

TURPENTINE.

Turpentine has been fluctuating considerably during the week, having been considerably lower than present prices, which are as follows:—For Spot, 48s.; February-May, 48s. 3d. Lower prices are, however, asked for later deliveries than those mentioned.

LIVERPOOL OIL MARKET

January 12th.

Refined oils are very quiet, but sellers now quote 6¾d. for Russian and 7½d. to 8¾d. per gallon for American.

PETROLEUM SPIRIT continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

NEW YORK, January 11th.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

PHILADELPHIA, January 11th.

Standard White is quoted at 7·55.

RUSSIA.

BAKU, December 26th (o.s.)

There is little business doing on the oil market. Prices are assuming a more normal figure.

BELGIUM.

ANTWERP, January 5th.

The petroleum market is very firm. Price of Standard White, spot, 19½ francs per 100 kilos; January, 19¾ francs; January-March 20 francs.

GERMANY.

HAMBURG, January 6th.

The petroleum market is very firm. Price of American Standard White remains at 7·50 marks per 50 kilos.

ROUMANIA.

January 6th.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	3·35-3·40
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery	3·00- —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octroi tax of 12 fcs. per 100 kilos

PRICES FOR EXPORT.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
„ sp. gr. 0·720-0·725	8·00- 9·00
„ sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

BOMBAY, December 23rd.

There has been no further decline in prices of Burma oils since our last report.

American, "Snowflake," 150 deg.	Rs. 6	0	2
„ Chester, 125 deg.	4	8	2
„ Monkey Brand, 125 deg.	4	2	2
Russian, "Anchor," 125 deg.	4	14	6
„ "White Camelia" brand, 125 deg.	4	0	2
„ "Rising Sun," bulk, in local made tins	3	14	0
„ "Elephant" brand, in local made tins	3	10	0
„ Bulk, in Bombay Bazaar, 125 deg. per 10 gallons	3	3	0
Borneo oil in bulk	2	14	6
Burma Oil, in bulk, per 8 imperial gallons	2	11	0

TUBES FOR SALE.

FOR SALE, about 80 Tons of New 6-inch outside diameter Steel Tubes, ⅜-inch thick for 1,400 lbs. per square inch pressure, 16½-feet lengths, and flush joints, suitable for Oil Well Borings, etc.

These Pipes cost £22 per ton, and we can offer same subject to being unsold at £10 per ton.

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IMPORTS of PETROLEUM into UNITED KINGDOM

FOR THE WEEK ENDED JANUARY 9th, 1906.

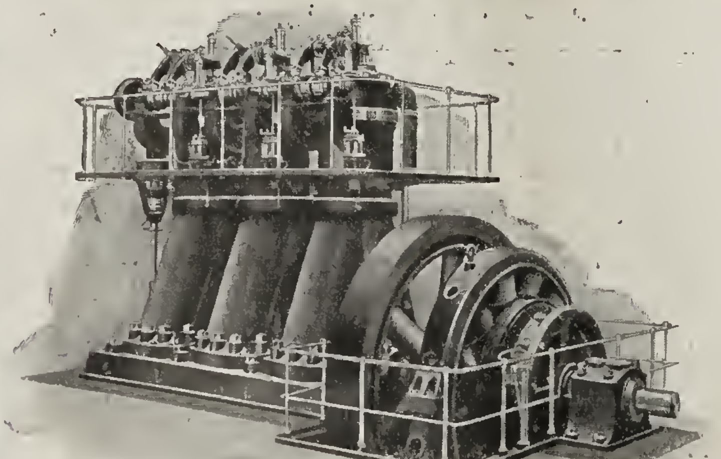
Specially prepared for this Journal by . . . the Custom House.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Jan. 4	London	Mordaunt Bros.	Eagle Point	73 brls.	Lub]	2,980	Philadelphia
,, 4	,,	,,	,,	121 brls	,,	5,000	,,
,, 4	,,	,,	Mackinaw	60 brls.	,,	2,500	,,
,, 4	,,	Consolidated Petroleuui Co.	Caucasian	Bulk	Ref. Lamp	1,258,800	Batoum
,, 4	,,	,,	,,	Bulk	,,	544,000	,,
,, 4	,,	Anglo-American Oil Co.	Minnetonka	200 brls.	Lub	8,000	New York
,, 4	,,	,,	,,	2597 brls.	,,	103,880	,,
,, 4	,,	,,	,,	150 brls.	Pet. Pitch	6,000	,,
,, 4	,,	,,	,,	15 brls.	Min. Colz.	600	,,
,, 4	,,	General Petroleum Co.	Silverlip	Bulk	Ref. Lamp	614,250	Port Arthur
,, 4	,,	,,	,,	Bulk	,,	341,250	,,
,, 4	,,	W. B. Dick and Co.	Portia	200 brls.	Lub	8,750	Hamburg
,, 5	,,	,,	Eagle Point	97 brls.	,,	3,900	Philadelphia
,, 5	,,	Trinidad Asphalt Paving Co.	,,	60 brls.	,,	2,400	,,
,, 5	,,	W. Balchin	Mackinaw	200 brls.	,,	8,000	,,
,, 5	,,	A. Brown & Co.	,,	60 brls.	,,	2,400	,,
,, 5	,,	Anglo-American Oil Co.	Narragansett	Bulk	Lamp	2,805,120	New York
,, 5	,,	,,	,,	500 cases	,,	4,000	,,
,, 5	,,	,,	,,	Bulk	Lub.	49,030	,,
,, 5	,,	Felton and Crepin	City of London	10 casks	Turp. Sub.	406	Brussels
,, 5	,,	J. Harrison	Ibis	6 brls.	Lub.	300	Antwerp
,, 6	,,	G. W. Sheldon and Co.	Starling	6 casks	M.L. Grease	300	,,
,, 6	,,	,,	,,	6 casks	M.Lub.	260	,,
,, 6	,,	Consolidated Petroleum Co.	Elsie Marie	Bulk	Gas	860,000	Philadelphia
,, 6	,,	,,	,,	Bulk	,,	210,000	,,
,, 6	,,	T. S. Harris and Co.	Cayo Largo	200 brls.	Lub.	8,000	Galveston
,, 6	,,	London and India Docks Co.	Maine	35 brls.	,,	1,400	New York
,, 6	,,	S. Guiterman and Co.	Minnetonka	6 brls.	Lub. Gr.	200	,,
,, 8	,,	A. Brown and Co.	Eagle Point	100 br, s	Lub.	4,000	Philadelphia
,, 8	,,	C. Price	,,	50 brls.	M.Lub.	2,000	,,
,, 8	,,	W. Balchin	,,	125 brls.	Lub.	5,000	,,
,, 8	,,	Ragosine and Co.	Mackinaw	145 brls.	,,	6,020	,,
,, 8	,,	G. W. Sheldon and Co.	Mesaba	12 pks.	Lub. Comp.	520	New York
,, 8	,,	,,	,,	12 bls.	M.Lub.	490	,,
,, 8	,,	,,	Ptarmigan	7 casks	,,	340	Antwerp
,, 8	,,	Produce Brokers	Starllng	95 brls.	,,	3,800	,,
,, 8	,,	G. W. Sheldon and Co.	Mesaba	195 cases	Lub. Gr.	460	New York
,, 9	,,	Produce Brokers	Mackinaw	60 brls.	M. Lub:	2,400	Philadelphia
,, 9	,,	Union Lighterage Co.	Eagle Point	25 brls.	,,	1,060	Philadelphia
,, 9	,,	D, Campbell and Co.	,,	125 brls.	,,	5,000	,,
,, 9	,,	Schliemann's Oil Co.	,,	60 brls.	,,	2,400	,,
,, 9	,,	Anglo-American Oil Co.	Burgo. Petersen	Bulk	Gas	542,280	,,
,, 9	,,	,,	Elsie Marie	Bulk	,,	542,280	,,
,, 9	,,	Mordaunt Bros.	W.Michailovitsch	23 casks	Tar oil	930	Riga
,, 3	Liverpool	G. B. Taylor	Victorian	1425 brls.	M.Lub.	57,000	New York
,, 3	,,	Meade-King, Robinson and Co.	Tyria	275 brls.	Resid.	11,000	Trieste
3	,,	Pickford's Ltd.	Rhienland	39 pks.	Paste	370	Hamburg
,, 3	,,	Livrepool Storage Co.	,,	18 brls.	Lub. Comp.	700	,,

DIESEL OIL ENGINES.

RUN ON CRUDE OIL.

HIGHEST ECONOMY. EXTREME REGULARITY
EXTREME SAFETY. SELF STARTING.
NO IGNITERS. NO HEATERS.



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Pratt's Motor Spirit

PACKED IN SEALED TWO GALLON CANS.

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QUALITY TELLS.

To Dealers only.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Jan. 3	Liverpool	Liverpool Storage Co.	Bovic	450 brls	Lub.	18,000	New York
,, 3	,,	,,	,,	30 brls.	M.L. Grease	1,200	,,
,, 3	,,	,,	Victorian	1100 brls. 20 ½-brls.	Lub.	44,000	,,
,, 5	,,	G. B. Taylor	Vedamore	865 brls. 50 cases	M.Lu	36,000	Baltimore
,, 5	,,	Meade-King, Robinson and Co.	Gothland	104 brls	,,	4,160	Hamburg
,, 9	,,	Vacuum Oil Co.	Cevic	80 brls. 127½-brls.	Lub.	5,700	New York
,, 9	,,	,,	,,	60 brls.	Resid.	2,400	,,
,, 9	,,	A. Hopps and Sons	,,	60 brls.	M. Lub.	2,400	,,
,, 9	,,	E. H. Kellogg and Co.	,,	50 brls.	,,	2,000	,,
,, 9	,,	G. B. Taylor	,,	1250 brls.	,,	50,000	,,
,, 9	,,	Anglo-American Oil Co	Potomac	Bulk	Lamp	828,350	Philadelphia
,, 9	,,	,,	,,	Bulk	Gas	395,900	,,
,, 4	Bristol	Heaton and Co.	Josso	10 brls.	M.Lub.	430	Antwerp
,, 4	,,	Anglo-Bhosphorus Oil Co	City of Cologne	75 brls.	,,	3,000	Hamburg
,, 4	,,	H. R. James and Son	Wells City	235 brls.	Lub.	9,400	New York
,, 4	,,	,,	,,	205 brls.	,,	8,200	,,
,, 4	,,	,,	,,	325 brls.	Min. Colz.	13,000	,,
,, 4	,,	Pickfords, Ltd.	Exeter City	30 brls.	M. Lub.	1,080	,,
,, 4	,,	W. Smith and Co.	,,	655 brls.	Lub.	26,200	,,
,, 4	,,	,,	Wells City	485 brls.	,,	19,400	,,
,, 4	,,	,,	,,	50 brls.	Lamp	2,000	,,
,, 3	Grimsby	J. Sutcliffe and Sons	Ashton	10 casks	Lub.	400	Antwerp
,, 3	Hull	T. Wilson, Sons, and Co.	Rinaldo	12 casks	Naph.	480	Reval
,, 5	,,	,,	Cito	58 casks	Tar oil	2,320	Hamburg
,, 5	,,	,,	,,	54 brls.	Lub.	1,800	,,
,, 5	,,	,,	Juno	36 cases	,,	740	,,
,, 5	,,	,,	,,	58 casks	Benzine	2,320	,,
,, 9	,,	Consolidated Petroleum Co.	Kura	Bulk	Refined	598,400	,,
,, 3	Manchester	Bramwell, Fern, and Co.	Garrick	90 brls.	M.Lub.	3,700	New York
,, 3	,,	Liverpool Storage Co.	,,	570 brls. 30 ½-brls.	,,	24,300	,,
,, 4	,,	G. B. Taylor	,,	30 brls.	,,	1,200	,,
,, 4	,,	W. Wingate and Johnston	Man. Commerce	32 brls.	Lub.	1,280	Philadelphia
,, 4	,,	Worthington and Boler	,,	50 brls.	,,	2,100	,,
,, 4	,,	Bramwell, Fern and Co.	Lestris	100 brls.	M. Lub.	4,220	Antwerp
,, 4	,,	Diamond Lubricating Co.	Garrick	55 brls.	Lub, Gr.	2,200	New York
,, 4	,,	Donald Currie and Co.	Westmoreland	4 casks	M.Lub.	800	Hamburg
,, 4	,,	,,	,,	30 casks	,,	600	,,
,, 4	,,	J. T. Fletcher and Co.	Lestris	19 casks	,,	760	Antwerp
,, 5	,,	W. Hodgson and Co.	Garrick	60 brls	,,	2,400	New York
,, 6	,,	Homelight Oil Co.	Aureole	Bulk	Illum.	645,790	Batoum
,, 6	,,	Lamport and Holt	Terence	45 brls.	M.Lub.	1,580	New York
,, 6	,,	Diamond Lubricating Co.	Westmoreland	50 brls.	,,	2,000	Hamburg
,, 8	,,	Liverpool Storage Co.	Man. Commerce	120 brls.	Lamp	4,830	Philadelphia
,, 8	,,	,,	Terence	909 brls.	M.Lub.	36,050	New York
,, 8	,,	Crew, Levick Co.	Man. Commerce	835 brls. 65 casks	,,	37,150	Philadelphia
,, 8	,,	Meade-King, Robinson and Co.	,,	538 brls.	,,	21,520	,,
,, 8	,,	,,	,,	60 brls.	M.Colza	2,400	,,
,, 8	,,	,,	,,	270 brls.	M.Lub.	10,800	,,
,, 3	Newcastle	Tyne-Tees Steam Shipping Co.	J. Ormston	100 brls.	R. Min. Lub.	4,000	Hamburg
,, 6	,,	,,	Leu Oporto	18 casks	M.Lub.	720	,,
,, 6	,,	,,	Juno	78 brls.	,,	3,120	Antwerp
,, 6	Aberdeen	Meade-King, Robinson and Co.	Tantallon	300 steel brls	Naph.	15,000	Rotterdam
,, 5	Glasgow	Donaldson Bros	Lakonia	60 brls.	M.Lub.	3,080	Baltimore
,, 5	,,	Anchor Line	Astoria	1184 brls.	,,	47,360	New York
,, 5	,,	,,	Columbia	2804 pks.	,,	111,760	,,
,, 3	Dundee	D. Alexander and Sons	Sardinia	50 brls.	,,	2,000	Hamburg
,, 3	Grangemouth	W. G. Yooll and Co.	Staffa	200 brls.	Lamp	8,000	,,
,, 3	Leith	,,	Weimer	100 brls.	,,	4,360	,,
,, 3	,,	,,	Corsica	50 brls.	,,	2,180	,,
,, 3	,,	J. Currie and Co	Weimer	92 casks	Lub.	3,680	,,
,, 6	,,	,,	Cumberland	50 brls.	,,	2,000	,,
					Net Total	11,131,996	

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO JANUARY 9th, 1906.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.
Austria ...	—	—	—	—	11,000	11,000	—	—	—	—	—	—	—	—	11,000	11,000
Belgium ...	—	—	13,930	13,930	—	—	—	—	—	—	—	—	406	406	14,336	14,336
Borneo ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Canada ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Germany ...	612,940	612,940	35,320	25,320	—	—	—	—	2,320	2,320	—	—	2,320	2,320	652,900	652,900
Holland ...	—	—	—	—	—	—	—	—	15,000	723,000	—	—	—	—	15,000	723,000
Roumania ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Russia ...	2,488,590	2,488,590	—	—	—	—	—	—	—	—	—	—	930	930	2,489,520	2,489,520
Sumatra, &c	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
U.S.A. ...	4,599,800	4,601,850	814,100	1,097,080	2,400	10,400	2,550,460	2,550,460	—	—	—	—	22,000	22,000	7,988,760	8,281,790
Other Countries	—	—	—	—	—	—	—	—	480	480	—	—	—	—	480	480
	7,701,330	7,703,380	863,350	1,136,330	13,400	21,400	2,550,460	2,550,460	17,800	725,800	—	—	25,656	25,656	11,171,996	12,173,026

The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XIV. *(New Series.)* January 20th, 1906. No. 359.

Editorial Notes.

Progress in the Borneo Oil Fields.

Remarkable progress continues to be made in the oil fields of Borneo upon the concessions worked by the Shell Transport and Trading Co., and we venture to think that the latest statistics which we publish in this issue of the operations of the company for the past twelve months will prove not only very interesting, but pleasant reading for the shareholders. The production of crude oil has now reached a remarkable figure, and for the past three months this works out at an average of over 46,000 tons per month, while, taking the year through, there has been an increase in the crude production of 136,000 tons. The same phenomenal progress marks the operations of the refineries and shipments. In the case of the former, the kerosene output last year was practically double what it was the preceding year, while the shipments have considerably increased, as is shewn by the fact that during last year they rose from 207,000 tons to 269,000 tons. The enormous production of the crude oil, however, has, in spite of these ever increasing shipments, caused the stocks to materially expand, for now something like 60,000 tons of kerosene and other products are awaiting shipment, as compared with 19,000 a year ago. In a word, the rapid growth of the petroleum industry in Borneo is one of the most important characteristics of the world's industry for 1905.

Last Year's Production in Texas-Louisiana.

The gross production of Texas-Louisiana for the past year has, in spite of the continuous decline which we have noted for several months, established a record, and Texas itself has yielded the greatest output ever credited to a single State in America during twelve months. As will be seen from the specially prepared diagram upon another page, the gross production from the Texas-Louisiana oil producing territories is over 40,000,000 barrels, this marking an advance of about 12,000,000 barrels upon the production for the corresponding twelve months. With regard to Texas, it has produced over 30,000,000 barrels in 1905, but this has been brought about by the great production for the months of May, June and July, when, in 31 days, the wells collectively produced between 4,000,000 and 5,000,000 barrels. A very different state of things exists to-day, however, for the production is certainly not more than one-third what it was then. Still, an advance has been made upon the total figures for the preceding year, and the gross production shews an advance of about 8,000,000 barrels. In the case of Jennings, its production for the year shews an increase of about 6,000,000 barrels, but in that field, too, a steadily declining production has been recorded as the year came to a close. The greatest production during 1905 was in the opening month of the year, when it reached 1,400,000 barrels, and the smallest was in December when the month's figures stood at 680,000 barrels.

The Baku Workers' Strike.

Baku is again in the throes of a strike among the oil field workmen, who have formulated fresh demands. Some of these are touching their sanitary conditions, and are, therefore, a resuscitation of what was generally considered to be ancient history, but in other cases the demands are entirely new—for instance, the employés of the English companies, we learn, demand among other things free restaurants. Needless to relate, the petroleum industry is, therefore, again in a state of semi-stagnation, and not only are many of the oil field properties idle, but almost the whole of the kerosene refineries are closed. The petroleum industry, which was being rapidly brought to its normal condition in the Caucasus, has consequently suffered a severe set back, and discontent again prevails. The strike is, however, mainly of a political order, and the demands made by the men are of secondary importance. The latest information concerning the position is found upon the next page of this issue.

American December Petroleum Statistics.

In the eastern fields of America the operations during December brought about an unlooked for decline in all departments of field work, and therefore the statistics for that month, published on another page of this issue may, on the whole, be considered far from satisfactory. Although there was little or no change in the market quotations, drilling activity fell off to some extent, and what work was done with an effort to increase the production of high-grade oil resulted in failure. West Virginia is no longer looked to for the bringing in of territory of the "gusher" type, and for the present, at all events, it has been outstripped in new production by the districts of South-east Ohio. Calhoun county, which for some months has offered the greatest inducement to operators for new territory, has now fallen to the rear, for the expected extension is a very small area, and will consequently soon be covered by the drill. Only six producers were completed during the month, and these averaged less than 30 barrels each, while of the entire number of wells completed in West Virginia, considerably over 50 per cent. were devoid of oil in paying quantities, although many may yet rank as gas producers.

In South-east Ohio, the Woodsfield district completed 21 productive wells, each averaging more than 42 barrels, which supplied over half of the new production of the fields. In the Pennsylvania oil region, almost a hundred fewer wells were completed in December than in the preceding month, the decline in the new production being close upon a thousand barrels. With regard to the Trenton Rock oil fields, the decrease in completed wells during the month was 15, and the new production over 400 barrels, while, at the same time, there was a falling off in new work of nearly 30 wells. In the Kansas and Indian Territory fields, the closing month of the year witnessed continued activity, and no less than 465 wells were completed, with a production of about 16,000 barrels. The new production, therefore, was double that of the Pennsylvania and Lima oil fields combined.

THE MAYORALTY OF PETROLIA.

MR. J. D. NOBLE RE-ELECTED.

For the third year in succession, the subject of our sketch—Mr. J. D. Noble, head of the Canadian Oilfields, Ltd.—has been elected to the Mayoral chair of Petrolea, Canada, on new year's day. In speaking in its leader columns of the election, the *Petrolia Advertiser* states that, as the head of one of the most important operating companies in the district, Mr. Noble is certainly a factor, as an employer of labour, of the utmost importance to the town. We desire to congratulate Mr. Noble upon the confidence which the citizens of Petrolia still repose in him, and we trust that he will long continue to press home the claims of the country's petroleum industry to the capitalist classes.

GERMAN ITEMS.

Boring for petroleum is about to commence at Winsen on the river Aller, and at Bergen, near Celle.

* * *

Following upon the acquisition by the Internationale Bohrgesellschaft of the oil wells and refinery of the Hannoversch-Westfallische Erdoelwerke Co. comes the announcement of the taking over by the Deutsche Tiefbohrgesellschaft of the properties of the Elsassische Petroleum Gesellschaft, the Dutch company operating at Walburg, Alsace.

PRODUCTION OF SPIES PETROLEUM COMPANY.

Spies Petroleum Co., Ltd.—The output for the week ending Jan. 14th was 131,070 poods, or 2,114 tons. The decrease was mainly due to holidays.

THE LATEST NEWS FROM BAKU.

The latest news from Baku is of a distinctly reassuring nature, and though the telegrams are somewhat vague, it appears that work has again been commenced. The production of crude oil during the first 15 days of December amounted to 10,000,000 poods. According to information to hand the baling operations are now proceeding without any interruptions. The reconstruction of the plant destroyed in the recent disasters is being pushed on with great energy. The Loan Committee has already commenced granting advances.

According to an approximate estimate, the total production of crude oil for the past year amounted to 400,000,000 poods against 615,000,000 poods in 1904. The sharp decline began only after the August riots and fires. Up to the 1st of August (o.s.) the output amounted to 315,300,000 poods, and consequently the output of the remaining four months is estimated at only 85,000,000 poods against the normal 200,000,000 poods.

The decreased supply of crude oil has, in the first place, affected the export operation in illuminating oils, as well as the liquid fuel trade. The least affected in the kerosene trade is the interior. It is now clear that on the 1st of January, 1906 (o.s.), the stocks were very small, and the shortage could only be made good out of future production.

The destruction of the majority of the oil properties, however sad an event, is not without its good effect, and that is in the direction of technical improvements, of which many of the properties were badly in need. The erection of the new oil field plants is being carried on certain improved lines, particularly in the application of internal combustion engines and electric power. It is, therefore, quite clear that, after the completion of the work of reconstruction, when all the properties are again working at their full capacity, the output will not only return to its normal rate, but will probably exceed it.

THE TSAR AND PEACE.

A few days ago Dr. Paul Dvorkovitz had the privilege of presenting an address to the Tsar at St. Petersburg, on behalf of the *Tribune*, respectfully suggesting that the present moment was propitious for a message from His Majesty which would be a commanding appeal to the Governments and peoples of the western world to complete without delay the great work with which His Majesty's name will be imperishably associated.

Dr. Dvorkovitz has received a reply from the Emperor to the effect that His Majesty's Government intends very shortly to present to various countries for their consideration a draft programme for the second Peace Conference to be convoked at His Majesty's initiative, thus actually confirming the unchangeable sympathy of His Imperial Majesty for those principles which formed the basis of the first Conference.

An Important Strike.—A borehole of the Telega Oil Co., situated in the part of Bustenari known as La Croitoare, has struck oil at a depth of 250 metres. This part of Bustenari has so far been but slightly developed.

THE OIL FIELDS OF BORNEO.

IMPORTANT DETAILS.

THE NEDERLANDSCH INDISCHE EN HANDEL MAATSCHAPPIJ AND ITS OPERATIONS IN 1905.

We are exceedingly pleased to now be in a position to give details of the operations of the Nederlandsch Indische Industrie en Handel Maatschappij, the Dutch concern of the Shell Transport and Trading Co. in the Borneo oil fields during the past year. Hitherto it has been possible to announce only approximate figures shewing the wonderful development which takes place in the Borneo fields in the course of twelve months, but, with the compilation of the details for the last three months of the year, we are enabled for the first time to give a brief *resumé* of the company's operations for a whole year.

A View of the Wells—

The specially prepared diagram which we here publish is almost sufficient in itself to shew the remarkable increase that has been brought about in the production of the wells during the past year, but it is interesting to notice other none the less remarkable strides which during 1905 have been made in the development of the petroleum industry in far-away Borneo.

First of all, however, we will take the production of the company. Successive increases have now brought it up to a figure of about 46,000 tons per month, as against 31,000 tons at the commencement of last year, these figures being based upon the statistics now issued for every quarter of the year. The enormous production which is now reached is, as our readers are probably aware, owing in a great degree to the striking of a very prolific spouter quite recently, but, apart from this fact, the diagram shews how in each successive quarter the yield of the company's concessions in Borneo is increased.

At the beginning of 1904 the production was approximately 17,000 tons of crude oil per month; in the middle of that year it had risen to 24,000 tons monthly; at the end it was over 26,000 tons per month, while now it is nearly double that figure.

Thus the average per month for the past year is about 35,000 tons, as against 23,500 tons for each month in 1904. It may be here advisable to remind our readers that the Borneo fields contain two kinds of crude oil—one from the upper and another from the lower strata. The upper stratum is encountered at a depth between 600 and 700 feet, while the lower one is struck at a depth of about 1,200 feet from the surface. The upper stratum produces so-called natural liquid fuel, which contains very little illuminating oil, but the lower stratum yields oil having occasionally a paraffin base. So far as we understand, the total production from these two levels is almost equally divided.

Reverting to the figures of the operations of the company for the past year, we see that with the completion of the refinery, both the intake and the output shew considerable advances, and, whereas 255,000 tons were treated in 1904, no less than 347,000 tons have been dealt with during the past year. As to the output of the refineries, the figures have been increased by over 50 per cent., for, whereas 222,000 tons of products were received in 1904, the output of kerosene and other products for the past twelve months has exceeded 300,000 tons.

—and the Refinery.

The shipments have correspondingly increased, the 200,000 tons of 1904 having now reached 270,000, while the stocks above ground have been doubled and the shipments greatly augmented, for no less than 60,000 tons of products have been stocked last year, as against 19,000 for the same period of 1904. In order that our readers may gather the wonderful progress that is being made at Borneo, we append tabular statements of the operations for each three months of the past year, as against those for the similar period of 1904.

January–March, 1905 (Compared with 1904).

	1905. First Three Months (tons)	1904. First Three Months (tons)	Increase. Tons.
Production of Crude Oil	95,070	53,290	41,780
Refinery Intake	63,735	47,420	16,315
Refinery Output—			
Kerosene	23,340	15,115	8,225
Other Products	30,260	23,265	6,995
Shipments—			
Kerosene	24,100	13,925	10,175
Other Products	34,888	22,305	12,583
Shipped elsewhere for Refining—			
Light Crude Oil	22,210	Nil.	22,210
Stocks awaiting shipment, 1st April, 1905—			
Kerosene	7,645	4,200	3,445
Other Products	7,925	7,900	25
Crude Oil in Store	33,430	20,330	13,100

April–June, 1905 (Compared with 1904).

	Second three months.		First 26 weeks.	
	1905. Tons.	1904. Tons.	1905. Tons.	1904. Tons.
Production—				
Heavy Crude Oil	26,640	19,760	55,580	61,260
Light Crude Oil	69,270	53,040	135,400	64,830
Total	95,910	72,800	190,980	126,090
Refinery Intake—				
Crude Oil	84,875	63,550	148,610	110,970
Shipped elsewhere for Refining—				
Light Crude Oil	24,314	5,550	45,544	5,500
Refinery Output—				
Kerosene	31,425	18 375	54,765	33,490
Other Products	42,185	36,125	72,445	59,390
Shipments—				
Kerosene	35,494	19,300	60,420	33,225
Other Products	33,205	33,550	67,183	55,855

Stocks awaiting Shipment—	July 1st, 1905. Tons.	July 2nd, 1904. Tons.
Kerosene	7,776	3,220
Other Products	18,250	10,240
Crude Oil in Stock	20,620	25,115

July–September, 1905 (Compared with 1904).

	Third three months.		Totals for the nine months.	
	1905. Tons.	1904. Tons.	1905. Tons.	1904. Tons.
Production—				
Crude Oil	91,485	77,570	282,575	204,120
Refinery Intake—				
Crude Oil	78,140	66,819	214,639	178,752
Shipped elsewhere for Refining	10,065	5,561	55,589	11,061
Refinery Output—				
Kerosene	30,610	19,047	85,380	53,694
Other Products	39,701	41,460	109,596	102,911
Shipments—				
Kerosene	25,278	17,413	85,694	50,638
Other Products	56,235	37,504	113,498	93,359

Stock awaiting shipment—	Oct. 2nd, 1905 Tons.	Oct. 1st, 1904. Tons.
Kerosene	14,830	4,840
Other Products	8,600	12,200
Crude Oil in Stock above ground	24,240	28,705

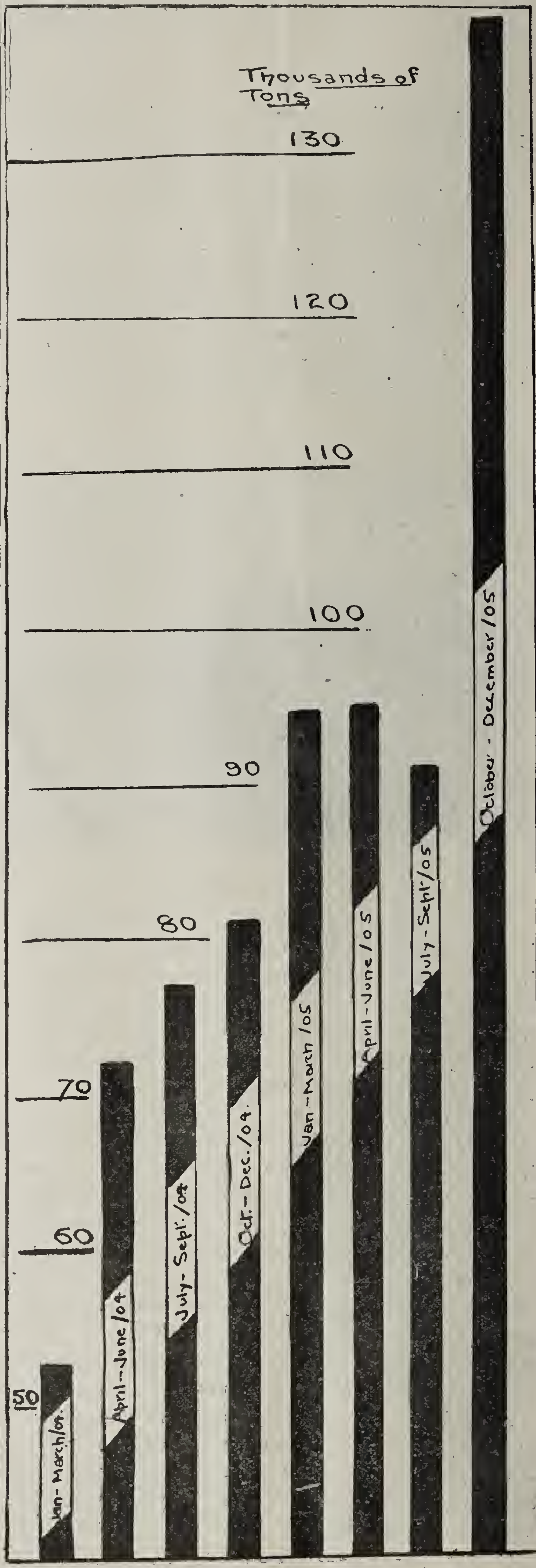
October–December, 1905 (Compared with 1904).

	Last quarter.			
Production—	1905.	1904.	1905.	1904.
Crude Oil	139,120	81,600	421,695	285,720
Crude Oil Sold	—	8,687	33,839	19,748
Intake of Refineries.	113,206	76,329	347,635	255,081
Output of Refineries—				
Kerosene	49,026	26,953	145,739	79,647
Other Products	52,200	40,863	166,061	143,774
Shipments—				
Kerosene	38,020	22,542	123,714	73,180
Other Products	32,904	41,408	146,403	134,767

	Dec. 30th, 1905.	Dec. 31st, 1904
Crude Oil in stock above ground	46,649	23,377
Stock awaiting shipment—		
Kerosene	31,237	9,225
Other products	30,092	10,644

REMARKABLE GROWTH OF THE PRODUCTION OF THE BORNEO FIELDS.

This diagram is based on statistics received from the Nederlandsch Indische Industrie en Handel Maatschappij, the London agents for which are Messrs. M. Samuel & Co.

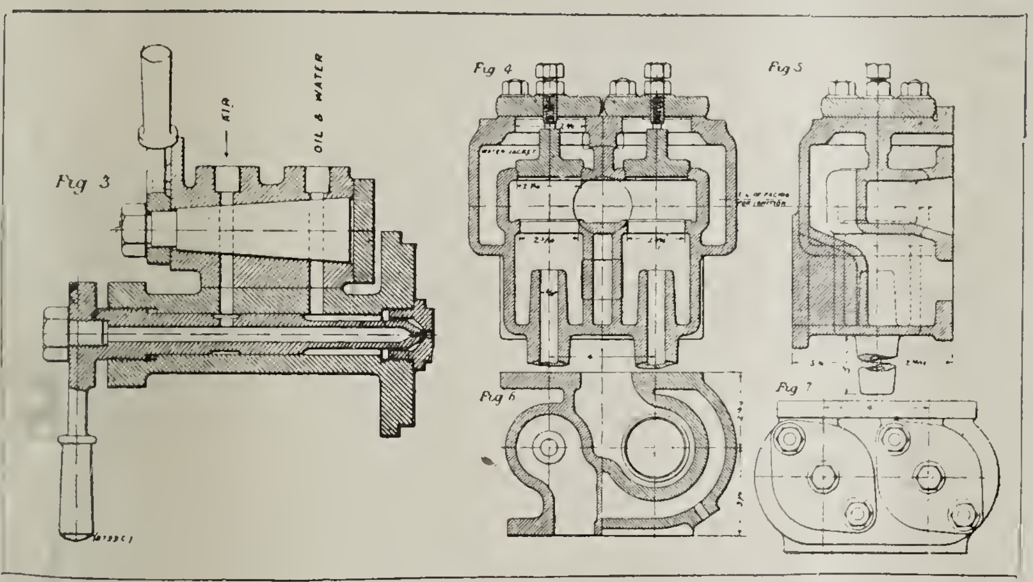


THE GRIFFIN OIL ENGINE.

The description of the engines built by the Griffin Engineering Co., of Bath, should be interesting not only to our own readers, but also to builders and users of internal combustion motors. Engines using ordinary kerosene are not uncommon in various parts of the world, although the working preference is for those motors consuming the lighter forms of kerosene products. The attractive feature of the Griffin engine seems to be its capacity for using any grade of oil without change in the compression, or, in fact, in any particular.

No alteration of any kind is required; the change from one oil to another can be made instantaneously, even from petrol in specific gravity of 0·704 to Texan oil having a specific gravity of 0·940 and a flash point of 260° F. The time required to start the engine from the cold varies somewhat with the oil used. With petrol the start can, of course, be made instantaneously, and even with the Texan oil 20 minutes suffice. With russolene or refined tar oil, about 10 minutes are needed to warm up the vapouriser in making a start. This tar oil has a specific gravity of unity, and a flash point of 124 degrees, and is therefore a perfectly safe fuel. It is obtainable in almost unlimited quantities from the gas works of the country, at the cost of 3d. per gallon. It is stated to work in the engine in every way as cleanly and satisfactorily as russolene, which at present costs here 4d. a gallon, and the Griffin Engineering Co. is, accordingly, undertaking the construction of stationary engines to utilise this British product which, as stated, can be obtained at two-thirds the cost of russolene, and gives equally satisfactory results. As the engines do not require to be built specially for working with this oil, but can be run with any oil, users are in no danger of the temporary failure of a supply, since some cheap mineral oil is available in every locality, and this or any mixture of oils can be used without any modification of the engine or its accessories. In fact, three engines supplied by the firm for some tug boats on the Seine, at Paris, were designed to use russolene, and it was only after they were installed that the possibility of using creosote in them was discovered. They are now run exclusively on this, since, owing to the customs and duties the cost of paraffin oil in Paris is 6d. per gallon retail. Alcohol is cheaper, and petrol nearly as cheap. The refined tar oil can, on the other hand, be obtained at 4d. per gallon from the Paris gas works, and has therefore been definitely adopted by the company running the boats. After running three months with this tar oil, the engines were opened, when the exhaust passages and valves were found perfectly clean; as a result, the company have ordered two more engines of eight horse-power each, to work with the same fuel. These engines will be of the same pattern as another late machine which has been built for the Junin Railway Co., Chili, under the superintendence of Messrs. Strain and Robertson, MM.Inst.C.E., Glasgow, who have been good enough to send some notes of their trials of the engine, which are appended.

The engine has four cylinders, each 11 inches in diameter, with a 14-inch stroke. These cylinders are arranged in pairs, the two trunk pistons of each pair being connected to a crosshead common to both, and thus both drive a single crank. The other pair drive another crank, so that the engine has two cranks, which are set at an angle of 180 degrees. Either of the pairs of cylinders can be driven independently of the other. A small starting engine of six horse-power is fixed to the engine frame. This being of a small size, is easily started by hand, and can then, by friction gearing, be used to start the main engines. It will, at other times, be used for driving a centrifugal pump, and could, if required, be also utilised for driving a dynamo or deck winch. The main engines drive a single three bladed screw, epicyclic reversing gear being fitted. In forward gear the drive is direct on to the propeller shaft, the gear wheel being in action only when the motion of the propeller shaft is reversed.



The vapouriser is identical with others, and it should be noted that its temperature never exceeds about 50° F., so that cracking of the oils used, with the consequent deposition of tar, is avoided. The characteristic feature of these engines is the addition of water to the charge of oil. The amount added is low, about one-fourth the weight of oil used. The oil and water are simultaneously sprayed into the vapouriser through the sprayer, shewn in Fig. 3. Air at a pressure of two pounds per square inch is supplied by a small air pump driven by an eccentric on the main shaft of the engine. This air enters the sprayer as indicated, and in passing through the rear hole in the plug top, reaches the centre of the hollow plug, finally escaping through the fine nozzle at the front. Here it meets the oil and water mixture, which passing through the front hole of the plug cock, reaches the annular space at the front of the sprayer plug, and on its way out into the vapouriser is caught and knocked into fine spray by the jet of air. The oil and water are forced up to the sprayer by admitting the air pressure above the fluid in the tanks which contain them. These tanks are therefore of necessity perfectly sealed, and no oil can escape from them into the boat. The tanks are of sufficient size to carry about a week's supply of fuel. The supply of oil and water to the sprayer is controlled by a couple of valves, which are opened by a plug on the stem of either of the two inlet valves to a pair of cylinders. Whenever an inlet valve is lifted, the oil and water valves are simultaneously opened, and then only ; hence there is no waste when the engine is running light. The inlet valves are mechanically controlled by the governor, opening only when permitted by the latter. Hence in running light, cold air is not drawn into the cylinders, or through the vapouriser, a cirumstance which makes it possible for the engine to run indefinitely on a light load. The heat of the vapouriser is maintained by the exhaust gases, which flow under it on their way to the exhaust pipe. Both inlet and exhaust valves are thoroughly water-jacketed, both sides and top, as shewn in Figs. 4 to 7, so that the seats keep cool even at full load. The designed speed of the engine in the present case is 220 revolutions per minute; it is, however, equally efficient at much higher speed when these are desired. At 300 revolutions per minute it indicates no less than 170 horse-power. The speed can be adjusted as required by means of a speed lever with which both pairs of engines can be simultaneously speeded up or down. By slacking a thumb screw, either engine can be disconnected from the speed. regulator, and, if desired, its admission valve can be locked in place, so that at low powers the work can be done by one pair of engines only. The governor is operated on the hit and miss principle, a double governor being used. This is placed on the engine bed between the two units making up the complete engine. The governor shaft lies fore and aft, and is driven by spiral gearing from the half time shaft, which in its turn is transverse to the bed, and is driven by spiral gearing from the crank shaft. The governor speed is about one-third greater than that of the engine. As stated, it is double, there being a set of balls and accessories for each of the pairs of cylinders. Both sets of balls are mounted on a hollow shaft, driven in the manner already explained. As the balls flys out, they tend to force a plunger working in the hollow shaft against the pressure of the spring shewn. This plunger has a travel of about half-an-inch, and by means of suitable link work can displace the tails of the inlet valve rod about $\frac{5}{8}$ inch. This displacement carries the tails free from the striker operated by the half-time shaft, so that when the governor balls fly open the strikers fail to lift the inlet valves to the cylinders. There is, of course, a separate gear for each pair of cylinders. The governor spring being adjustible, synchronous working of the two governors is readily secured by adjusting these springs.

THE PRICE OF PETROL ADVANCED.

We are informed on the best authority that all grades of naphtha, including motor spirit, were advanced yesterday one penny per gallon. Even with this advance the price remains below that ruling during the first six years of the motor industry, and therefore there is no reason why this slight increase in price should be viewed with dismay.

THE ALLGEMEINE PETROLEUM INDUSTRIE ACTIEN GESELLSCHAFT.

This company, which, as our readers will recollect, was formed some time ago by the Disconto Gesellschaft, of Berlin, acting in conjunction with the important German banking firm of Bleichroeder and Sons, to take over various petroleum interests acquired by the above financial group mainly in Roumania, has issued its report of the directors, which was submitted to the general meeting last Tuesday at Berlin, contained the following references to the various petroleum companies in which the company is interested.

Bustenari Company.

This company is highly prosperous, and for the financial year ended April 30th, 1905, paid a dividend of five per cent. on the ordinary shares and twenty per cent. on the preference shares. The production is continuously growing, and encourages the hope that the current year will yield equally satisfactory results.

The Telega Oil Company.

This company was in an unsatisfactory financial condition when it was taken over by the company, and had to be re-organised. This re-organisation, which is taking the form of a transformation into a Roumanian company under the title of " Sylva " Co., and a reduction of the capital from £400,000 (10,000,000 francs) to 8,500,000 francs, will be completed shortly. It is hoped that by economical management this enterprise will gradually be brought to a dividend paying basis.

The Vega Refinery Company.

After prolonged investigations, which were made necessary by local conditions, the construction of the refinery was commenced in the early part of 1905, and the work was pushed forward so actively that the refinery was ready to start work on the 15th December. The capital of the company is 3,750,000 francs, of which 70 per cent. has been paid up.

The Credit Petrolifer.

The realisation of the programme of this company, which is to promote the development of the petroleum industry in Roumania, is progressing satisfactorily. The capital is 3,000,000 francs, which is all paid up. The company now possesses a system of pipe lines for pumping crude oil and a large number of tank waggons, and has already commenced dealing in petroleum products. The company has purchased the tank waggons and export installations of the Aurora Co. at Braila, and also the mechanical workshop of the International Co. at Campina.

The company is also interested in the International Roumanian Petroleum Co., of Amsterdam, which company hasfor its last financial year distributed a dividend of 6 per cent.; also in the Compagnie Industrielle des Petroles, of Paris. The last-named company has a capital of 10,500,000 francs, and is engaged in the manufacture and distribution of benzine in the Latin countries. For their last financial year they have disiributed a dividend of 5 per cent.

The assets of the company as shewn in the balance shhet are : — Participation in various companies, 11,734,571 marks; debtors, 637,838 marks. The liabilities are : capital, 12,000,000 marks ; creditors, 4,401 marks. The profit for the year is 368,010 marks.

AMERICA'S EXPORTS OF PARAFFIN WAX.

In the following table are given the amount of paraffin that was exported to each country from America during the month of November and during the period of eleven months ended November 30th, 1905, with comparisons, the quantities being in pounds:—

EXPORTS DURING NOVEMBER.

Exported to—	1904.	1905.
United Kingdom	10,886,918	13,172,079
Belgium	188,209	64,350
France..	49,300	27,900
Germany	2,129,466	352,124
Italy	1,526,847	2,600,287
Netherlands	1,008,454	630,771
Other Europe	667,754	588,330
British North America	5,097	3,523
Central America and British Honduras ..	5,286	84,051
Mexico	1,136,366	333,746
West Indies and Bermuda	2,326	—
Brazil	16,805	18,885
Chili	—	—
Other South America countries	30,609	4,000
Japan	82,393	1,288,059
British Australia	148,132	—
Other Asia and Oceanica	22,791	41,691
British Africa	59,021	129,899
Other Africa	—	—
Total, pounds	17,965,784	19,348,895

EXPORTS FOR ELEVEN MONTHS.

	1903.	1904.	1905.
United Kingdom	101,359,875	90,152,148	88,022,401
Belgium	6,124,067	2,942,634	893,978
France	656,381	606,528	656,850
Germany	21,547,709	14,350,820	8,097,653
Italy	14,055,207	10,086,760	10,334,143
Netherlands	7,903,117	6,938,408	6,917,105
Other Europe	8,982,894	5,567,840	5,653,334
British North America ..	535,076	184,261	51,802
Central America and British Honduras	262,720	435,048	739,885
Mexico	6,205,365	7,729,778	6,371,070
West Indies and Bermuda..	23,875	5,436	13,939
Brazil	240,103	218,732	179,354
Chili	161,066	44,921	—
Other South America countries	114,073	150,938	256,778
Japan	11,636,036	13,576,687	8,935,916
British Australasia.. ..	5,626,778	1,611,006	2,833,917
Other Asia and Oceanica..	1,907,607	2,201,687	2,734,850
British Africa	664,720	1,881,005	2,066,231
Other Africa	—	—	94,095
Total, pounds	188,006,669	158,754,637	144,853,301

AMERICAN PATENTS GRANTED.

Oil Well Device.—Frederick H. McCullough, Fairview township, Butler county, Pa.

The combination with a sleeve, a depending pipe carried by said sleeve, the lower end of said pipe having openings formed therein, of a working barrel adapted to surround said pipe, said barrel consisting of an inner and outer shell, said inner shell having openings formed therein adapted to align with the openings of said pipe, a plurality of plugs staggeredly arranged in said outer shell, said plugs having openings formed therein, a check valve carried by the lower end of said working barrel,

Oil Separator.—Russell Parker, Brooklyn, N.Y.

The combination with the separator tank of substantially uniform cross section from one end to the other, of a filter normally located near one end of the said tank, two apertured members between which said filter is held, and handles connected with said members and extended lengthwise of the separator tank to the other end thereof, to permit of compressing said filter and of moving it lengthwise of the tank in contact with the walls thereof.

AMERICAN NOTES

Port Arthur and Sabine Shipments.—The grand total of crude oil shipments from Port Arthur and Sabine (Texas) during the past year is placed at 6,595,706 barrels, or an average of about 550,000 barrels per month. The greatest shipments took place in May last when the figures for the month were 868,000 barrels.

The Union Oil Company.—It is reported upon reliable authority that the Union Oil Co. of California has recently purchased from the Michigan Steamship Co. the tank steamers "Roma," "Washenaw" and "Lansing," which have been in the coastwise carrying trade between the Texas ports and New York.

The Dayton Field.—The Dayton oil field is only making a very poor shewing for a new producing territory at present. It commenced to yield last September, during which month about 9,000 barrels were produced. The following month this was increased to double the amount, but since September these latter figures have not been reached.

Drilling Test Wells.—Operators in the lower South-west fields are starting a little new work looking for new pools or extensions of the old fields. In Wetzel county, the Archers Fork Oil and Gas Co. is commencing to drill a test on the J. H. Dawson farm, while on the Buffalo run, in the same district, the Kavawha Oil Co. has completed the rig for its test on the Ezra Hays farm.

Hurricane Does Great Damage.—During the first few days of this year a hurricane swept over south-east Texas and south-west Louisiana, doing considerable damage to the oil fields. A large number of derricks were blown down, while various pumping stations and machinery houses were unroofed. Sour Lake was the greatest sufferer, for there 50 derricks were thrown down, and many steam plants dismantled.

Humble in 1905.—The Humble oil field which was scarcely known a year ago, has, according to the reliable publication—the *Oil Investors' Journal*—produced 18,000,000 barrels of oil last year. During the first month its production was 278,000 barrels, or an average of 9,000 barrels daily, and at the close of the year its daily production was 19,000 barrels. In June last, the daily average production of the field was 106,000 barrels, while in May and July it was 87,000 barrels daily.

Transfer of Property.—The Raywood Canal Co.'s property, comprising 27,000 acres of land at Haywood, Texas, 50 miles east of Houston on the Texas and New Orleans Railroad, has been bought by a new corporation, the Raywood Canal and Milling Co., controlled by J. S. Cullinan (president of the Texas Co.), W. T. Campbell, J. D. Crawford, R. E. Brooks, A. C. Swanson, H. Masterson and W. B. Sharp. The property was purchased from the Alliance Trust Co., Ltd , and the United States Freehold and Mortgage Co., both of Scotland, for $300,000,

The American Oil and Refinery Co.—This company, whose operations on the Miner Ranch in Contra Costa county have frequently been mentioned, is now entering the actual and production of gas in large quantities. In all the company has sunk five wells upon its property, four of which were abandoned as the result of the collapsing of the casing. The other well, however, is producing very large quantities of gas, and is one of the deepest in the State. For the purpose of utilising the immense flow of gas, private parties contemplate forming a company with $5,000,000 capital.

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 18th January, 1906, as follows:—

Business is quiet, but prices are firm at the undermentioned rates:—

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LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{11}{16}$-$\frac{13}{16}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	3/9-4/3
,, ,, ..	£650,000 5½% Pref.	£1	6/9-7/9
Californian Oilfields	£250,000 Ord.	£1	6½-6⅝
European Petroleum	£550,000 Pref.	£1	$\frac{3}{16}$-$\frac{5}{16}$
,, ,, ...	£550,000 Ord.	£1	1/0-2/0
,, ,, ...	£376,000 Deb.	£100	87-90
Russian Pet. & Liquid Fuel ..	£500,000 6½% Pref.	£1	13/6-14/6
,, ,, ...	£600,000 Ord.	£1	14/0-15/0
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	3⅝-3⅞
,, ,, ...	£575,000 Ord.	£1	9/6-10/6
Shell Transport & Trading ..	£2,000,000	£1	22/0-23/0
,, ,, ,, ..	£1,000,000 Pref.	£10	9⅛-9⅜
Spies Petroleum Company ..	£312,500	10s.	8/3-8/9

SCOTCH COMPANIES.

Supplied by Messrs. Maclean and Henderson, Stirling.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. 8½ pd	£199,750	£10	18$\frac{1}{16}$
Do. 6% Cum. Pref. ..	£100,000	£10	12$\frac{1}{16}$
Burmah Oil, Ord.	£1,100,000	£1	58s. 0d.
Do. Pref.	£250 000	£1	24s. 9d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	.. 8½
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	18
Do. New (£8 10s. pd.)	£131,750	£10	16¼
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	81s. 0d.
Do. 6% Cum. Pref.	£100,000	£10	12¾
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	37s. 6d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	66s. 0d.
Do. "B" Deb...	£150,000	£100	150

RUSSIAN COMPANIES.

Company.	Nom. Value in Roubles.	Quotations on Jan. 16.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	395	400
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	3,775	3,850
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	--	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	165	168
Naptha Trading Co., Petrol.	250	—	—
Nobel Bros.	5,000	8,500	8,600
,, ,, ...	250	—	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

DUTCH COMPANIES.

Company.	Quotations Jan. 3rd.	Quotations Jan. 10th.	Florins.
Arnhemsche Petroleum Mij. ..	81	81	1,000
Dordtsche Petroleum Mij. (Pref.) ..	124	126	500
,, ,, ,, (Deb. 4½%)	102¾	102¾	1,000
Elzasser Petroleum Mij.	44	44	1,000
Gaboes ,, ,, ...	19¾	19¾	—
Holl. Rumeensche Petroleum Mij...	21⅝	21⅝	1,000
Int. Rum. Pet. Mij.	91	91	500
Java Petroleum Mij...	30	30	1,000
Koninklyke Nederl. Pet. Mij. Shares	387½	395	250-1,000
,, ,, Share certificates	389½	398	1,000
Mœara Enim Petroleum Mij. ..	105	108½-109½	100
,, ,, 1-1,000 Oblig. 5	102½	102¾	250-1,000
"Moesi Ilir" Petroleum Mij. ..	36½	34½	—
Nederl.-Rumeensche Petroleum Mij.	15	16	
Nieuwe Ned. Petroleum Mij. And...	55¼	55¼	1,000
Oliebronnen in Hannover Mij. ..	151	149½	—
Panolan Maatschappij Cert. ..	350½	350½	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	134	136	1,000
,, ,, (Common) ..	88½	93½	—
Sumatra-Palembang Petroleum Mij	59½	59	500

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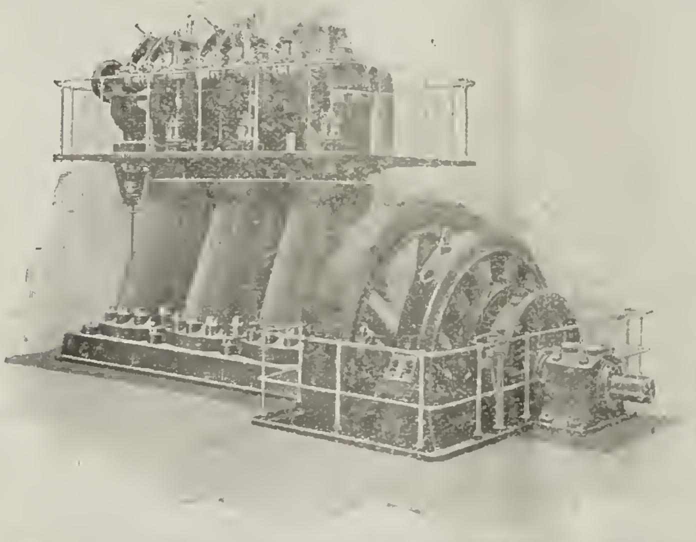

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Saturday, January 20th, 1906.

THE SOLUTION OF THE LIQUID FUEL DIFFICULTY.

THE continued development of the heavy oil districts of Texas, Kansas and Indian Territory, as well as many localities in California, and the increase in the production of the heavier grades of oil, has had the effect of raising the hopes of many advocates of liquid fuel on the other side of the Atlantic, that in a short time an important trade in liquid fuel will be carried on between America and this country.

Over and over again in our editorial columns have we traversed this subject, and in each instance we have been compelled to admit that there was after all one great obstacle to the widespread use of liquid fuel in England. By this time, everyone, we should imagine, is convinced of the great advantages which appertain to the adoption of liquid fuel, and we scarcely think there are many people who will argue that as a steam raiser, it is not immeasurably superior to its older competitor coal.

Most of the prejudices against the fuel itself, have, by the determined faith and consistent advocacy of a handful of far-seeing men, been swept away, and the hopes that Sir Marcus Samuel expressed some years ago of the dawn of the time when England's navy would go to the sea with their boilers fired by oil fuel, are now upon the fringe of realisation. The Admiralty has cast its vote in favour of liquid fuel, and consequent upon this decision we now see the erection of large oil storage depôts upon our southern coast, while not a few manufacturers are calmly viewing the claims of the new fuel in their varied aspects. There are many difficulties which still stand in the way, and to some extent bar the road of progress, but these are of an essentially arbitrary character. It is neither the chemical nor the mechanical objections which have for so long kept the general adoption of liquid fuel in the background, but it has been the economic question which has more than any other so long barred the way.

There are very few who have glanced toward America to furnish a solution for the surrounding difficulties, yet, nevertheless, the supply of oil which the Texas, Kansas, and Californian territories are capable of producing, should go a long way to lifting liquid fuel to the position it ought to occupy.

As our readers are well aware, matters even in regard to the heavy oil production in America are in what may be said to be their initial stages. Following upon the great output of the Beaumont wells a few years ago, an enormous demand was created in America itself for liquid fuel, and for a time this could not be satisfied. But as time went on, production again grew ahead of the demand, and fresh markets were sought, though it was an open question whether the supply could be maintained. In this direction, however, at the present time, all feelings can be set at rest. Kansas has come to the fore with a production which is even the marvel of the American oil men. Its vast fields—as yet only touched on the fringe by the drill—are producing such great quantities of oil that all available storage is filled to overflowing, and all efforts to alleviate the situation are proving of little avail. Some millions of dollars have already been spent in storage installations and in the laying of pipe lines, so that the production in the Kansas and Indian Territory fields might be taken care of and dispatched to a ready market; but, in spite of this, the stocks are enormously increasing, and the marketing of the oils from these mid-continental American fields becomes a matter more and more complex.

In every direction liquid fuel is used, and to-day the fastest of America's trans-continental expresses are fired by means of liquid fuel. The great hives of commerce —those units in the industrial life of America—have long ago learned to recognise the economy which is brought about by the use of liquid fuel, and still the supply is far and away in excess of the demand. In California, too, practically the same state of things prevails, and with a view to opening out in the world's markets, and finding a ready outlet for much of the over-production, we learn that a proposition is at present on foot to construct a pipe line across the Isthmus of Panama—a distance of over 40 miles—in order that the Union Oil Co. may be in a position to carry out large and important contracts for liquid fuel which have been secured in England.

What is in store for the American fields in the future we know not, but it may with confidence be assumed that for many years to come there will be almost no limit to the supplies of liquid fuel which will be available for the outside world, even when the great and continually increasing demand at home has been fully satisfied.

In regard to geographical position, the fields of Texas, and even those of the whole of the States and California offer distinct advantages, that is, assuming that the pipe line across the Isthmus of Panama is an accomplished fact. The wonderful system of pipe line organisation which spreads itself out like fingers over the whole of the oil producing regions of the States can now be said to possess direct communication with the Gulf of Mexico, and surely no situation could be more favourable from a European point of view.

Before Texas became an important factor in the world's supply, the freight rates alone from other producing fields to this country rendered the general use of liquid fuel in England almost out of the question, but we are now given to understand that liquid fuel from America can be landed in this country at a figure which will certainly place its claims very favourably before manufacturers. Given this, and the future of liquid fuel in a country like England, so far removed from petroleum production, is quite safe, and, with the announcement that important contracts have been secured for the Californian fuel this side of the Atlantic, we may expect to hear something in the near future not of the advantages of liquid fuel, for it has passed its experimental stages, but of its rapid advancement in England.

LONDON OIL SHARE MARKET.

Friday, Jan. 19th.

There are few changes to report in connection with the Oil Share Department of the London Stock Exchange since we last wrote, although most days have witnessed some little dealing, especially in European and Russian Debentures. On Saturday, Anglo-Russians stood at $\frac{3}{16}$-$\frac{5}{16}$, Assam Oil $\frac{5}{8}$-$\frac{7}{8}$, Baku Ordinary 3s. 9d. to 4s. 3d., Preference 7s. 3d. to 7s. 9d., Bibi-Eybats $\frac{1}{2}$-$\frac{5}{8}$, Debentures 88-93, Californian Oilfields 6$\frac{5}{8}$-6$\frac{7}{8}$, European Petroleum Preference $\frac{3}{16}$-$\frac{5}{16}$, Debentures 86-90, Russian Ordinary 14s. 6d. to 15s. 6d., Schibaieff Ordinary 10s. to 10s. 6d., Preference 3$\frac{5}{8}$-3$\frac{7}{8}$, Shell Transport Ordinary 22s. 3d. to 22s. 9d., Preference 9-9$\frac{1}{2}$, and Spies $\frac{11}{32}$-$\frac{13}{32}$.

The same range of value has practically ruled throughout the week, until Spies improved on Wednesday to $\frac{3}{8}$-$\frac{7}{16}$; but on Thursday the market weakened, Shell Transport Ordinary losing 3d. at 22s. to 23s., Schibaieff Ordinary also losing 3d. at 9s. 9d. to 10s. 3d., and Russian Ordinary 9d. at 13s. 9d. to 14s. 9d. On the other hand, Spies continued to improve, closing at 8s. to 8s. 6d., which shewed a further rise of 6d. per share.

To-day's prices are given in full on page 48.

PRODUCTION OF THE EUROPEAN PETROLEUM COMPANY, LIMITED.

We have received a notification from the secretary of the European Petroleum Co., Ltd., to the effect that, according to a telegram from the Baku office, the production for the past five weeks has been as under :—

Week ended December 17th ..	101,868 poods,	or 1,642 tons.
,, ,, ,, 24th ..	78,828 ,,	,, 1,271 ,,
,, ,, ,, 31st ..	8,149 ,,	,, 131 ,,
,, ,, January 7th ..	89,052 ,,	,, 1,436 ,,
,, ,, ,, 14th ..	89,362 ,,	,, 1,441 ,,

CONDITIONS IN THE BORYSLAW FIELD.

LATEST DETAILS.

The latest report from Boryslaw states that the output of the Klaudyusz well, the largest producer in the Boryslaw field, remains on the same high level, in spite of the rumours of a decline. This fact also disposes of the assumption that the Arthur well of Messrs. Lipinski and Goldhammer has been drawing off the oil from the Klaudyusz. The distance of 1,000 metres between the two wells is far too great for such a "drawing off" to be possible. Of the newer wells, the Swiatowid and Aniela are each yielding from 30 to 40 tons daily, while the Galicia Co. has completed a borehole—No. 8—which produces 80 tons daily.

Of particular importance is the bringing again into the producing line of the Etna well, in which Messrs. David Fanto and Co. have a 50 per cent. interest. This well, which is situated at Potok, is one of the oldest and most celebrated wells in the Boryslaw district. All the other wells which have made the Boryslaw industry—the Hekla, Feiler, Karpath No. 39, Hammerman, etc.—are now abandoned, and shut down. This remark also applied to the Etna well until quite recently, when after being deepened to 1,028 metres, it began to yield 50 tons daily. This fact shews that the Potok lands are still far from exhausted, and that by drilling deeper fresh oil strata can be tapped. In any case, this strike will lead to deepening operations by neighbouring firms, who have all been eagerly waiting for the results of the work on the Etna well.

At Tustanowice, 76 new boreholes have been completed recently. These include some by the Actien Gesellschaft fuer Naphta Industrie, the Karpathen Co., the Galicia Co., Messrs. Perkins, McIntosh and Perkins, David Fanto and Co., and Dr. Stefan Freund. Among the producing wells has now been placed the Elgin well of Messrs. Elgin, Scott and Co. Another new producer is the Sesam well of Messrs. Wolski and Co. The Litwa and Triumph wells continue to flow, each yielding 100 to 150 tons daily. In the Barbara well, strata of ozokerite were discovered at depths from 198 to 212 metres and at 230 metres.

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RESIGNATION OF THE DEUTSCHE BANK OFFICIALS.

The *Moniteur du Petrole Roumain* is responsible for the statement that Mr. J. Zeller, who was instrumental in inducing the Deutsche Bank to take an interest in the Roumanian petroleum industry, is about to withdraw from his position with the bank, and that the same remark also applies to Mr. R. Sorge, the petroleum expert of the Deutsche Bank. This is said to be due to the unsatisfactory state of the affairs of the Steaua Romana, for which these two gentlemen decline to assume responsibility. There has lately been a continued decline in the quotations of the Steaua Romana shares on the Berlin Stock Exchange.

THE PROFITS OF THE WIETZE PETROLEUM INDUSTRY.

The directors of the Handorfer Erdoelwerke, of Hamburg, in their report state that for their heavy Wietze crude oil they have realised 58·5 marks per ton, which they consider a fairly satisfactory price. Last year it was stated by the Wietze petroleum producers in their memorandum to the Government against the reduction of import duties on Roumanian and Galician crude oil that the crude oils produced in Germany realised, according to quality, 7·5 to 9·5 marks per 100 kilos., which was the lowest figure at which the producers could make any profit. It will be observed that the prices now realised are much below this minimum.

The higher price paid for Oelheim crude is due to the higher quality of that oil, but as the output at Oelheim is quite insignificant—amounting to less than one per cent. of the total output of crude oil in Germany—it is of little consequence. Taking the cost of the crude at Wietze at nine marks per 100 kilos., and the transport to the refinery at 0·50 marks, the results of the treatment of 100 kilos. of oil work out as follows:—Cost price at the refinery, 9·50 marks, and cost of treatment, 2·50 marks, making a total outlay of 12 marks. The receipts against these are:—six kilos. of illuminating oil, 1·02 marks; 14 kilos of solar oil, 1·19 marks; 15 kilos. of Vulcan oils, 10 marks; 25 kilos. of asphalt, 0·75 marks; making a total of 12·96 marks. Thus under such circumstances the refiner receives a gross profit of 0·96 marks. This calculation of profits is based on the manufacture of Vulcan oils, which are used as railway lubricants. For the manufacture of one ton of railway lubricating oil, two tons of heavy Wietze oil are required. The total consumption of such lubricating oils by the German railways in 1903-4 amounted to 19,282 tons, which would necessitate the treatment of 38,565 tons of Wietze crude oil. The production of crude oil at Wietze in 1904, however, has been double this quantity, and the surplus had therefore to be utilised for the manufacture of pale lubricating oils. The latter operation, owing to the heavier losses in treatment and larger use of chemicals, is much more expensive than the manufacture of black oils, whilst the prices realised for the pale oils are not, on the average, correspondingly higher. The treatment of the lighter, and consequently cheaper, crude oil, at a cost to the refiner of 11 marks, leaves him a profit of 0·92 marks. The price of 5·85 marks per 100 kilos. of crude, now announced by the Handorfer Erdoelwerke Co., of course leaves a larger margin of profit to the refiner at the expense of the producer.

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BAKU PRODUCTION.

The production of crude oil at the Baku oil fields in November amounted to 25,837,555 poods, and in the first 15 days of December to 9,961,691 poods. It will be noticed that the first-named figures are somewhat under the estimate.

HEYWOOD CORPORATION TO BUILD A PIPE LINE.

The development of a deep sand at Anse la Butte, greatly resembling the Jennings formation, and the bringing in of three productive wells in the latter part of 1905, puts the new Louisiana district upon a firm basis, and makes its position in the Gulf coast oil fields secure from this time on.

There is reason to believe, says *Oil Investors' Journal*, that further drilling this year will bring results more important than those obtained last year. The location of the field is ideal for the economical marketing of its product. Within two and one-half miles is the Bayou Teche, a navigable stream, and within the same distance the Southern Pacific Railroad gives an outlet to all points on its lines.

Heywood Brothers' Oil Corporation, which has been drilling at Anse la Butt for three years, and has developed a paying deep sand on its property, has decided to lay a pipe line immediately to Breaux Bridge, on the Bayou Teche, two and one-half miles east of the field, where it will be able to deliver oil to barges on the Bayou and to cars on the Southern Pacific. More than a year ago this corporation obtained its right of way, a franchise from the parish to lay its pipe line on the parish roads, and the rights from the town of Breaux Bridge to use property on the railroad and water front for its loading racks and terminals. Inasmuch as the drilling operations now under way may develop a much larger well than has yet been brought in at Anse la Butte, the Heywood Corporation desires to begin work immediately.

RUSSIAN NOTES.

A Ramany Spouter.—On one of Nobel's plots at Ramany a spouter is flowing yielding 60,000 poods of oil per 24 hours.

Oil Field Activity.—The work of re-construction is proceeding at the oil field with great energy, and there is every reason to hope that the production will ere long return to its normal figure.

Baku Prices.—The tone of the Baku market is unchanged. There were transactions on December 28th (o.s.), the prices being:—Bebe-Aibat crude oil, 16½ copecs, and residuals in ships, 20 copecs per pood.

Interior Markets.—The kerosene and liquid fuel markets in the Interior remain unchanged. Contrary to all expectations, there is no shortage felt anywhere of liquid fuel, and all demands of consumers are being satisfied with regularity. As far as it is possible to judge now, the stocks of liquid fuel on the Volga are sufficient, and the Volga shipping trade is assured of its fuel till fresh supplies come up from Baku in the spring.

AN IMPORTANT CRUDE OIL SHIPPING CONTRACT.

The Zeller Schlepp-Schiffahrtsgesellschaft has concluded an agreement with the Vacuum Oil Co. for the transport of 25,000 tons of crude oil per annum, from Wietze to Nordenheim, for a number of years. It is probable that a larger quantity will be transported annually, as the refinery of the Vacuum Oil Co. on the lower Elbe is capable of treating 50,000 tons of crude oil per annum. As a result of this contract the Zeller Schlepp-Schiffahrtsgesellschaft has increased its fleet by the addition of two tank boats, each being of 300 tons capacity. Each boat will be able to make on an average 40 return trips per annum from Wietze to Nordenheim.

PETROLEUM CONSUMPTION IN AUSTRIA-HUNGARY.

Simultaneously with the continued growth of the production of crude oil in Galicia, the consumption of petroleum in Austria-Hungary is steadily declining, and this is causing great concern to the petroleum firms. It is recognised that, as petroleum is essentially the illuminant for the masses, it should be sold as cheaply as possible, and it is felt that the time has come when, by concerted action of the Government and the petroleum refiners, the tax on petroleum should be reduced, and the price brought down to such a level that even the poorest will be able to buy the oil.

From 1903 to 1904, the consumption of petroleum per head of population declined from 5·37 to 5·09 kilos., and in 1905 could scarcely have amounted to 5 kilos. per head against 8½ to 9 kilos. per head per annum consumed in Germany, in spite of electricity and other illuminants, and the insignificant home production. On the other hand, however, the tax on petroleum in Germany is much smaller than in Austria.

REDUCTION IN RAILWAY RATES IN RUSSIA.

Commencing on the 21st December and continuing to the 15th of April, 1906, the following reduced rates are to be charged for the transport of crude oil and residuals from Black Sea or Baltic ports, or the Western land frontier, to any station in the interior, except where the Moscow-Kazan Railway has to be passed over.

In tank waggons belonging to the railways:—

On distances from 1 to 700 versts the general rate for carrying oil consignments of the second class.

One verst to 73 versts, $\frac{1}{24}$ copec per pood per verst; 74 to 259 versts, 3·04 copec per pood and $\frac{1}{75}$ copec per pood per verst; 270 to 543 versts, 5·65 copec per pood and $\frac{1}{85}$ copec per pood per verst; 544 to 700 versts, 8·87 copec per pood and $\frac{1}{100}$ copec per pood per verst; 701 to 1,388 versts, 10·44 copec per pood and $\frac{1}{200}$ copec per pood per verst; above 1,388 verst, $\frac{1}{100}$ copec per pood per verst.

When private tank waggons are used, the usual allowance will be made on the above rates.

LATEST QUOTATIONS FOR CALIFORNIAN CRUDE.

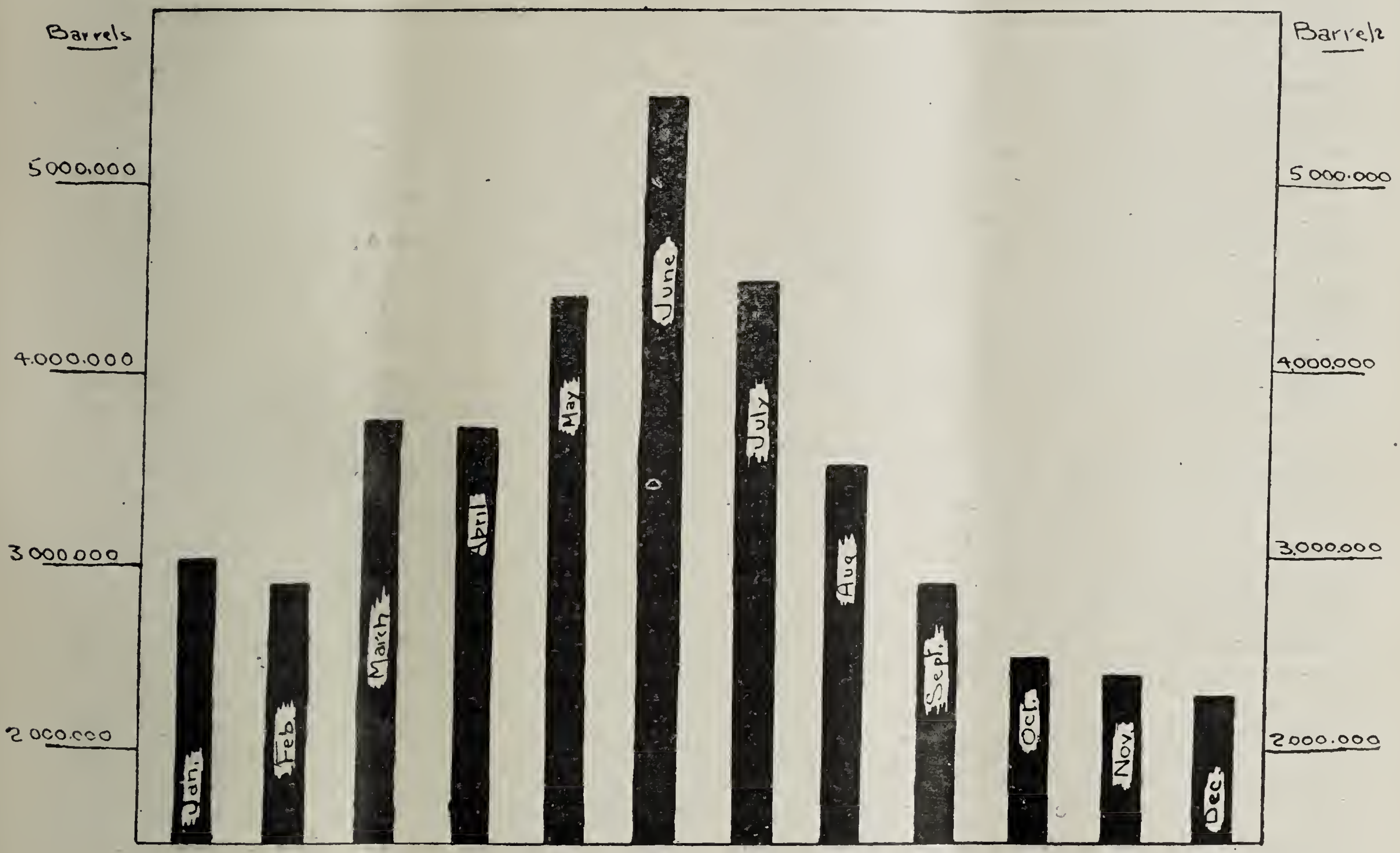
We have recently been asked to publish the latest quotations for California crude oil at the wells as offered by the recognised buyers. The prices are as under:—

	Price per barrel.
Coalinga.	
22 deg. up to, but not including 24 deg.	$0.20
24 deg. up to, but not including 25 deg.	.22½
25 deg. gravity or lighter	25
Kern River.	
14° gravity or better	18c
Santa Maria.	
24 deg. up to, but not including 25 deg.	.20
25 deg. or better.	.22½

The Production of the Texas-Louisiana Fields during 1905.

The diagram here given illustrates at a glance the almost phenomenal changes which have taken place in regard to the production of the Texas-Louisiana fields during the past year. It will be noticed that during the last two months of the year the production reached its lowest point, and was considerably less than one-half the figures for June last, when the production reached its highest point. About that time the Humble territory was producing very large quantities of oil, and this mainly accounts for the substantial figures recorded not only for that month, but both the preceding and succeeding months. The gross total production from these fields during the twelve months is placed at 14,000,000 barrels, as against 28,000,000 barrels for the year 1904.

It is estimated that during last year the total movement and consumption of Texas-Louisiana oil was about 28,000,000 barrels, so that there is an apparent surplus of nearly 13,000,000 barrels.



ROUMANIAN CRUDE OIL PRODUCTION.

According to the official statistics, the production of crude oil at the Roumanian oil fields in October and November was as under:—

	October. Tons.	November. Tons.
Prahova District—		
Bustenari	39,640	37,637
Campina-Poiana	9,454	7,731
Moreni	2,200	9,112
Baicoi-Tinta..	1,115	725
Other Fields..	501	446
Total for Prahova	52,910	55,651
Dambovitza District	1,853	1,982
Buzeu District..	1,046	1,051
Bacau	—	532
Total	55,809	59,216

The figures for November are not complete, and the *Moniteur du Petrole Roumain* estimates that about 1,500 tons have to be added for firms who have not yet sent in their returns, making a total production for November of about 62,000 tons.

The production of the leading firms was as follows:—

	October. Tons.	November. Tons.
Steaua Romana	19,845	17,997
Bustenari Co.	9,788	10,458
Telega Oil Co.	4,126	3,490
International Co.	4,365	3,666
Campina Moreni	—	4,028
Romano-American Co.	—	3,243
Moreni Co.	2,200	2,730
Hagienof and Campeanu	2,347	2,129
Arnheemsche Petroleum Co. ..	1,510	1,485
Stanescu and Giuglescu	950	1,061
Colombia Co.	1,539	1,090

DECEMBER OPERATIONS IN THE AMERICAN FIELDS.

In the Eastern fields of America, the month of December witnessed a general decline both in operations and output, and so the past year may be said to have closed in anything but a satisfactory way for the operators of high grade oil.

In the Pennsylvania oil regions, which embrace the various sections of New York, Pennsylvania, West Virginia, and South-eastern Ohio, 96 fewer wells were completed in December than in November, and there was a decrease of 919 barrels in the new production. In the same sections, 76 more wells were completed in November than in October, and the new production shewed a gain of 735 barrels. In the same sections 43 fewer wells were completed in October than in September, and there was a decline of 809 barrels in the new production. The new wells in December averaged 7¾ barrels each, and for November 8¼ barrels, while those of October averaged about the same as those for the month just closed. The calibre of the territory now under the drill has been steadily declining for several years, and the day of gusher strikes appears to be a thing of the past. The new production in December was 3,448 barrels, and the smallest recorded since August. November's new production was 4,367 and October's 3,632 barrels. There were 445 productive wells completed in December, 528 in November, and 470 in October.

Field operations in the fields producing Pennsylvania oil declined 43 rigs and 36 wells drilling in December, while in November they made a gain of 15 rigs and three wells drilling. An increase of 25 rigs and 32 wells drilling was recorded in October. During September the number of rigs declined 20, while the drilling wells gained 11, making a net decrease of nine. Since December, 1904, the decline has been 101 rigs and 59 wells drilling.

The West Virginia districts made the lowest record in new production during December since these fields came into prominence as a factor in the supply of crude petroleum. The new production for December was 898 barrels, and out of 133 wells completed 70, or more than 50 per cent., were non-producers. The new production was below that of November by 840 barrels. The November new production shewed a gain of 716 barrels over October, while October fell short of the September record by 901 barrels. A small gain in new operations was registered in several of the West Virginia districts.

South-eastern Ohio completed two more wells than West Virginia in December, but its new production was 666 barrels greater. Only 31 per cent. of the new wells were unproductive, as against 35 per cent. in November. In November, South-eastern Ohio completed 24 more wells than West Virginia, but its new production fell short by 310 barrels. In October, South-eastern Ohio completed 19 more wells than West Virginia, but its new production was 385 barrels greater.

During December, the West Virginia oil fields completed 63 productive wells, 44 dusters and 26 gassers, a total of 133. The new production was 898 barrels, or an averege of 14¼ barrels to the well. The greatest falling off was in Calhoun county, which has been furnishing most of the large wells of the past few months. Only six productive wells were completed in Calhoun in December, and they averaged a little over 28 barrels apiece. Nearly 53 per cent. of the wells completed in West Virginia the past month were dry or gas producers.

Thirty new wells were completed in the Kentucky-Tennessee oil field in December. Seven were dusters, and the new production amounted to 457 barrels. In November, 29 wells were completed, the new production was 522 barrels, and there were only three dry holes. June proved the banner month of the year, having completed 46 new wells, with a new production of 1,545 barrels, Twenty-eight wells per month was the average for the Kentucky-Tennessee field during the year just closed.

The grand total of all oil fields this side of the Mississippi river for December was 979 wells completed, 222 dry holes, and 7,646 barrels new production. This was a loss from the month preceding of 110 wells completed, 17 dry holes and 1,399 barrels production. The November record was 1,089 wells completed, 9,045 barrels new production, and 239 dry holes. This was a general increase over the October figures of 155 wells completed, 155 barrels new production, and 25 dry holes.

In the mid-Continent oil field, 465 wells were completed in December, including 43 dusters and 34 gassers, and the new production was 15,798 barrels. The new production was double that of the Pennsylvania and Lima oil fields combined. In November, 392 wells were completed, which included 51 dry holes and 41 gassers, and the new production was 12,068 barrels.

There were 174 wells completed in the Indiana oil fields in December, including 23 dusters, and the new production was 2,273 barrels, which represented an increase of six completed wells and three dusters, accompanied by a decline of 263 barrels in the new production. In November 168 wells were completed, including 20 dusters, and the new production was 2,536 barrels. While 57 more wells were completed than in October, the new production was 153 barrels less. The record for October was 111 wells completed, 2,689 barrels production and 15 dry holes.

On the last of December the Indiana oil fields contained 66 rigs and 166 wells drilling, which was a drop of 10 rigs and 9 wells drilling from the figures of the preceding month. On November 30 the count of new operations shewed 76 rigs and 175 wells drilling under way, which was a gain of 10 rigs and 12 wells drilling over the October record.

Following is the summary of wells completed, etc., in the various producing sections for December and November:—

State or Territory.	Completed.	Productive.	Dry.
New York	46	136	3
Pennsylvania	310	850	64
West Virginia	133	898	70
South-East Ohio	135	1,564	42
North-West Ohio	151	1,468	13
Indiana	174	2,273	23
Kentucky and Tennessee ..	30	457	7
Kansas	85	843	40
Indian Territory and Oklahoma	380	14,955	37
Total	1,444	23,444	299
Total November.. ..	1,481	21,113	331

The American Oil Market.

New York, Week ended Jan. 6th.

The reports from the producing fields during the past week shew about an average number of completions, but there has been an increase in the percentage of dry holes and in some sections about every third well proved devoid of oil. Nor have there been any large gas wells to help the producers in making good the cost of drilling these wells, and altogether the new year has opened very inauspiciously. A few good wells have rewarded the the drillers, but the great majority of the wells shewing oil were small pumpers, and the average production of the new wells has been discouragingly low. There now appears no incentive to push the drill beyond defined limits, as all efforts to establish extensions have proved fruitless, while wildcatting has for a long time resulted in rank failures and this class of development work has about been abandoned. In some sections only sufficient work is being done to satisfy the requirements of the leases, and in some fields most of the work has been suspended until spring. The prospect appears to be that the completions and new production will decrease still further during the next three months, and in the meantime the supplies of high grade oil will decrease at a rapid rate. Operations would doubtless be stimulated by the unexpected discovery of a new pool or by a substantial advance in the price of the product, but the prospects for the former are very slim, while they have about despaired of the market values responding to the gaining strength of the field situation. In the mid-continent fields the production continues to increase, says the *Oil, Paint and Drug Reporter*, but as the deliveries are also increasing, the producers are greatly encouraged; in fact, development work is going on actively, despite the accumulation of stocks, probably due to the fact that the results have been so uniformly successful. The conditions in Texas shew no important change, the production gradually declining and the price of the product hardening, though it is not believed that the producers will repeat the experiences of the previous effort to advance prices to a point at which the consumption will be seriously checked.

Refined and Products.—The demand for refined for export has been comparatively light during the past week as few tank steamers have been on this side. It is believed, however, that there will be a decided increase in the export movement later on, as the stocks abroad are not large and the competition from other producing countries is less keen than it has been, probably because they worked off a good part of their surplus. The engagements during the past week foot up about 125,000 barrels, all for shipment in bulk.

The price for barreled oil has remained steady at 7·60 for New York loading, and at 7·55c. for Philadelphia loading. The principal foreign markets are easier. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. 0d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export have been in active request, and sales of over 500,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in light request, and sales of about 5,000 barrels are reported. Pennsylvania crude is quoted at 7·60c. in barrels.

Crude naphtha continues steady. For export, sales of about 5,000 barrels have been reported.

CLOSING QUOTATIONS.

	Crude.	Week ended Dec. 30. 1905.	Jan. 6. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk		4·70	4·70
Residuum, bbls for export		6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were:—

	Week ended Jan. 6. 1905.	Jan. 6. 1906.
Tiona	1·60	1·68
Pennsylvania	1·45	1·58
North Lima	0·98	0·94
South Lima	0·93	0·89
Indiana	0·93	0·89
Canadian Oil:		
Petrolia	1·48	1.34

Refined—For Export.

		Week ended Dec. 30.	Jan. 6.
Cargo Lots for export	per gal.	7·60	7·60
In bulk		4·70	4·70
Philadelphia loading		7·55	7·55

Refined in Cases—110 Fire Test.

	Week ending Dec. 30.	Jan. 6.
5,000 to 10,000	10·35	10·35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended Dec. 30.	Jan. 6.
120 fire test, S.W.	per gal.	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ending Dec. 30.	Jan. 6.
Naphtha, crude, car. lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	17	17

Pennsylvania Oil Runs from Dec. 29th to Jan. 3rd were:—Dec 29th, 86,742; Dec. 30th and 31st, 168,219; Jan. 1st, 41,872; Jan. 2nd, 63,426; Jan. 3rd, 54,837. For the month of Nov., 2,169,468.

The Deliveries of Pennsylvania Oil for the same dates were:—98,255; 202,656; 43,432; 79,036; 74,984; For the month of Nov., 2,616,001.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended Jan. 5 and from Jan. 1, were as follows:—

	Week.	Year.	1905.
Refined, barrels and bulk	138,500	138,500	109,600
Refined, cases	541,000	541,000	—
Crude, barrels and bulk	—	—	—
Crude, cases	—	—	—
Naphtha, barrels	—	—	31,200
Residuum, barrels	—	—	—
Lubricating, barrels	—	—	—
Total, barrels cde. eq.	391,587	391,587	173,968

Clearances for the Week.

During the week ended Jan. 5th, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1905.
Refined	9,114,350	9,114,350	8,097,598
Crude	—	—	103,200
Naphtha	60,540	60,540	187,103
Residuum	—	—	—

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Jan. 5th	12,152,467
Total from New York, from Jan. 1, 1906	12,152,467
Same period last year	10,899,997
Increase	1,252,470
From United States, week ended Jan. 5th	16,582,737
Total from United States, since Jan. 1, 1906	16,582,737
Same period last year	12,683,903
Increase	3,898,834

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The "Review" Shipping List.

Jan. 18, 1906.

Specially Prepared for this Journal.

Note.—Except when otherwise stated the Vessels are Steamers.

(*The following abbreviations are used in this table:*—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Philadelphia	Sables d'Olonne	Arr. Jan. 11
ALCHYMIST	Hamburg	Salzaete	At Flushing, Jan. 16
AMERICAN	Antwerp	New York	Arr. Jan. 5
APPALACHEE	Shanghai	SanFrancisco	Arr. Dec. 15
APSCHERON	Antwerp and Rouen	Batoum	P. Tarifa, Jan. 4
ARAL	Hamburg	Tyne	Arr. Jan. 16
ARAS	Newport	Batoum	P. Oitavos, Jan. 3
ARGYLL	Astoria	Port Harford	Arr. Dec. 22
ASTRAKHAN	Philadelphia	Rotterdam	Arr. Jan. 15
AUGUST KORFF	New York	Hamburg	Arr. Dec. 30
AUREOLE	Barry	New York	P. Barry Island, Jan. 5
BAKU STANDARD	Rouen	Batcum	L. Const'iple, Jan. 5
BALAKANI	Queenstown	Port Arthur (Texas)	L. Dec. 29
BATOUM	Tyne	Philadelphia	Arr. Jan. 10
BAYONNE	New York	Venice	Arr. Jan. 14
BEACON LIGHT	Philadelphia	Lisbon	L. Jan. 16
BEME	Bombay	Rangoon	L. Dec. 7
BLOOMFIELD	Marcus Hcok	Rouen	L. Havre, Jan. 16
BORJOM	Batoum	Odessa	L. Sept. 18
BRILLIANT	Stettin	New York	Arr. Tyne, Jan. 17
BROADMAYNE	Tyne	Philadelphia	Arr. Jan. 10
BULLMOUTH	Yokohama	—	L. Jan. 10
BULYSSES	Kustendje	Thameshaven	Arr. Jan. 16
BURGERMEISTER PETERSEN	London	Philadelphia	P. Dungeness, Jan. 17
CADAGUA	—	—	In port, Bilbao, Dec. 26
CALCUTTA (Br. bq.)	Newcastle (N.S.W).	SanFrancisco	L. Dec. 4
CARDIUM	BalekPappan	Singapore	Arr. Jan. 14
CAUCASIAN	London	Philadelphia	P. Lizard, Jan. 14
CHARLOIS	Antwerp	New York	P. Lizard, Jan. 13
CHESAPFAKE	Manchester	Liverpool	Arr. Jan. 2
CHESTER	Antwerp	New York	P. Prawle Pt., Dec. 31
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Singapore	—	L. Balek Pappan, Jan. 3
COL. E. L. DRAKE	New York	Galveston	L. Oct. 25
COWRIE	Dunkirk	Cardiff	Arr. Jan. 11
CYMBELINE	Port Talbot	Philadelphia	P. Old Head of Kinsale, Jan. 7
CZAR NICOLAI II.	Batoum	Antwerp	L. Const'ple, Jan. 9
DAGHESTAN	Philadelphia	Dunkirk	L. Jan. 13
DAKOTAH	SanFrancisco	Shanghai & Canton	L. Nov. 24
DELAWARE	Cardiff	New York	L. Jan. 10
DEUTSCHLAND	Hamburg	New York	L. Jan. 13
DIAMANT	Philadelphia	Savona	L. Jan. 7
ELAX	Calcutta	Port Soesoe	Arr. Jan. 11
ELISE MARIE	London	New York	L. Jan. 14
ENERGIE	Philadelphia	Copenhagen	L. Jan. 14
ERIVAN	Swansea	Port Arthur	P. Lundy Is., Jan. 13
EUPLECTELA	Philadelphia	—	L. Jan. 16
EXCELSIOR	Philadelphia	Belfast	Arr. Jan. 14
EZIO	—		Coasting Peru
FRANCE MARIE	Marcus Hook	Barcelona	Arr. Dec. 6
GEESTEMUNDE	Hamburg and Tyne	Philadelphia	Arr. Jan. 7
GENESSE	Liverpool	Philadelphia	L. Jan. 3
GEORGIAN PRINCE	Rouen	Tyne	Arr. Dec. 6
GOLDMOUTH	Soesoe	—	L. Dec. 21
GRAF STROGANOF	Cronstadt	Odessa	In Tyne, Jan. 10
GUT HEIL	Pillau	Baltimore	P. Dover, Dec. 28
HAINAUT (Dch. shp.)	Antwerp	Alexandria	Arr. Jan. 6
HARRY WADSWORTH	Middlesbro'	Port Arthur (Texas)	P. Dungeness, Dec. 21
HELIOS	Fiume	Odessa	L. Jan. 6
HOTHAM NEWTON	Port Arthur (Texas)	U. Kingdom	P. Prawle Pt., Jan. 7
HOUSATONIC	Bombay	Newcastle (N.S.W.)	Arr. Jan. 16
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Barcelona	Taganrog	At Piræus, Jan. 8
J.B. AUG. KESSLER	Sumatra	New York	Arr. Dec. 31
JAMES BRAND	Tyne	Port Arthur (Texas)	L. Jan. 16
KURA	Tyne	Trieste	P. Oitavos, Jan. 6
LA CAMPINE	Antwerp	New York	L. Jan. 16
LA FLANDRE	Tyne	Philadelphia	Arr. Jan. 9
LA HESBAYE	Antwerp	Philadelphia	At New York, Jan. 7
LA MADALEINE	Cardiff	Marseilles	P. Gibraltar, Jan. 12
LA VIGUESA	Marcus Hook	Vigo	Arr. Nov. 6
LACKAWANNA	New York	London	L. Jan. 7
LE COQ	Philadelphia	Cette	L. Jan. 13
LOUTSCH	Barcelona	Novorossisk	L. Const'n'ple, Sept. 5
LUCERNA	Batoum and London	Manchester	Arr. Dec. 20
LUCIFER	Rouen	Newport	Arr. Dec. 1
LUCIGEN	Port Talbot	Philadelphia	L. Jan. 10
LUCILINE	Constant'ple	Cette	Arr. Jan. 16
LUMEN	Bergen	Tyne	Arr. Jan. 12
LUX	Blaye	Philadelphia	Arr. Jan. 11
MAKKAVEI	Batoum	Odessa	L. Nov. 13
MANHATTAN	Antwerp	New Orleans	Arr. Jan. 11
MANNHEIM	Copenhagen	Tyne	Arr. Jan. 15
MARGARETHA	Batoum	London	P. Sagres, Jan. 15
MEXICAN PRINCE	Tyne	Cuba	P. Dungeness, Jan. 14
MIRA	Manchester	Philadelphia	Sp. Jan. 4, 51 N., 11 W.
MUREX	Samboe	Bombay	Arr. Jan. 11
NARRAGANSETT	London	New York	L. Jan. 10
NERITE	Singapore	—	L. Jan. 12
NEW YORK	New York	Southampton	Arr. Jan. 7
OCEAN	Philadelphia	New York	P. Dungeness, Jan. 12
ORANJE PRINCE	Vallo	Tyne	Arr. Dec. 31
ORIFLAMME	Marseilles	Philadelphia	P. Cape Spartel, Jan. 10
OSCEOLA	—	—	United Kingdom Coasting Trade
OTTAWA	Philadelphia	Tampico	L. Jan. 3
OURAL	Tyne	Philadelphia	P. Beachy Head, Dec. 25
PALEMBANG	Pulo Samboe	Singapore	Arr. Dec. 18
PAULA	Danzig	Philadelphia	P. Dunnet Head, Jan. 5
PECTAN	Emden	New Orleans	Arr. Dec. 12
PENNOIL	Philadelphia	Dover	At St. Michael's, Jan. 2
PERLAK	Hankow	Shanghai	Arr. Dec. 9
PETROLEUM	—	Gibraltar	Arr. Dec. 18
PHOEBUS	Hamburg	New York	P. Scilly, Jan. 13
PINNA	Manchester	Philadelphia	L. Liverpool, Jan. 3
POTOMAC	Liverpool	Philadelphia	L. Jan. 12
PROMETHEUS	Clyde	Brisbane	Arr. Jan. 1
PRUDENTIA	Sulina	Rouen	Arr. Jan. 16
RION	Penarth	Novorossisk	Arr. Jan. 8

Vessel.	From.	For.	Latest Date and Position.
ROCK LIGHT	Rotterdam ..	Port Arthur (Texas)	P. Beachy Head, Dec. 22
ROSSIJA	Hamburg ..	Batoum	Arr. Jan. 6
ROTTERDAM	Rotterdam ..	New York ..	70 m. W. of Lizard, Jan. 15
RUSSIAN PRINCE	Liverpool ..	Havana	L. Dec. 23
SALAHADJI	Newchang ..	Singapore ..	Arr. Dec. 18
SEMINOLE	Philadelphia	Calcutta	At Suez, Jan. 15
SILVERLIP	Port Arthur (Texas)	London	Arr. Jan. 18
SINGU	Rangoon & Kurrachee	Bombay	Arr. Dec. 29
SNOWFLAKE	Southampton	Penarth	P. Needles, Jan. 16
SOPHIE	Messina	Batoum	L. Jan. 12
SPONDILUS	Singapore ..	London	P. Dover, Jan. 17
STANDARD	Hamburg ..	Philadelphia	L Tyne, Jan. 12
STROMBUS	Singapore ..	—	L. Jan. 14
SURAM	Penarth	Batoum	Arr. Jan. 10
SUWANEE	Philadelphia	Barrow and Belfast	L. Jan. 12
SVIET	Alexandria ..	Odessa	Arr. Jan. 17
TELENA	Cardiff	Singapore ..	L. Suez, Jan. 7
TEREK	Pera	Manchester	L. Jan. 14
TIFLIS	Hamburg ..	Tyne	Arr. Jan. 9
TIOGA	Batoum	Liverpool ..	Arr. Nov. 25
TONAWANDA	Manchester	New York ..	L. Liverpool, Jan. 5
TROCAS	Palembang ..	—	L. Jan. 15
TURBO	London	Port Arthur (Texas)	Off I. of W., Jan. 3
TUSCARORA	Calcutta	Boston	P. Gibraltar, Jan. 12
TWINGONE	Calcutta	Rangoon	L. Dec. 24
VEDRA	Philadelphia	Venice	Arr. Jan. 14
VILLE DE DOUAI	Kustendje ..	Calais	Arr. Jan. 9
VILLE DE DIEPPE	Dieppe	Philadelphia	Arr. Jan. 7
VOLUTE	Shanghai ..	—	L. Jan. 7
WEEHAWKEN	London	Bengkalis ..	L. Dec. 30
WILLKOMMEN ..	New York ..	Bremen	In the Downs, Jan. 15
WINNEBAGO (Late KINSMAN)	San Francisco	Shanghai ..	Arr. Jan. 3

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

January 19th, 1906.

The price of petroleum is unchanged. There is very little business doing, the latest quotations being:—

Russian, 5¾d.; American, 6⅜d.; Water White, 7¾d., Roumanian, 5¾d.

LUBRICATING OILS

are unaltered as follows:—

American pale, £7 5s. to £8 15s.
American dark cylinder, from £7 10s.
American filtered cylinder, from £10 12s. 6d.
Shellene, £5.

TURPENTINE.

American turpentine is somewhat easier, the latest quotations being:—For Spot, 47s. 6d.; February-April, 47s. 9d. to 48s.

LIVERPOOL OIL MARKET

January 19th.

Refined oils are very quiet, but sellers now quote 6¾d. for Russian and 7½d. to 8¾d. per gallon for American.

PETROLEUM SPIRIT continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

NEW YORK, January 18th.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

PHILADELPHIA, January 18th.

Standard White is quoted at 7·55.

RUSSIA.

BAKU, January 2nd (o.s.)

There is little business doing on the oil market. Prices are assuming a more normal figure. Crude oil, 16½ to 17 copecs; residuals, 20 copecs.

BELGIUM.

ANTWERP, January 12th.

The petroleum market is very firm. Price of Standard White, spot, 19½ francs per 100 kilos; January, 19¾ francs; January-March 20 francs.

GERMANY.

HAMBURG, January 13th.

The petroleum market is firm. Price of American Standard White remains at 7·45 marks per 50 kilos.

ROUMANIA.

January 15th.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs. ...	3·35-3·40
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery ...	3·00- —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural...	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octroi tax of 12 fcs. per 100 kilos.

PRICES FOR EXPORT.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
„ sp. gr. 0·720-0·725	8·00- 9·00
„ sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

BOMBAY, December 30th.

There has been no further decline in prices of Burma oils since our last report.

American, "Snowflake," 150 deg.	Rs.	6	0	2
„ Chester, 125 deg.		4	8	2
„ Monkey Brand, 125 deg.		4	2	2
Russian, "Anchor," 125 deg.		4	14	6
„ "White Camelia" brand, 125 deg. ..		4	0	2
„ "Rising Sun," bulk, in local made tins ..		3	14	0
„ "Elephant" brand, in local made tins ..		3	10	0
„ Bulk, in Bombay Bazaar, 125 deg. per 10 gallons..		3	3	0
Borneo oil in bulk		2	14	6
Burma Oil, in bulk, per 8 imperial gallons		2	11	0

TUBES FOR SALE.

FOR SALE, about 80 Tons of New 6-inch outside diameter Steel Tubes, ⅜-inch thick for 1,400 lbs. per square inch pressure, 16½-feet lengths, and flush joints, suitable for Oil Well Borings, etc.

These Pipes cost £22 per ton, and we can offer same subject to being unsold at £10 per ton.

Address "TUBES,"
Care of THE PETROLEUM REVIEW,
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IMPORTS of PETROLEUM into UNITED KINGDOM

FOR THE WEEK ENDED JANUARY 16th, 1906.

Specially prepared for this Journal by . . . the Custom House.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Jan. 10	London	A. Brown & Co.	Albatross	100 brls.	Lub	4,000	Hamburg
,, 10	,,	J. Harrison	Clapton	60 brls.	M.Lub.	2,400	Antwerp
,, 11	,,	General Petroleum Co.	Zephyr	300 steel brls	Pet. Spirit	15,000	Rotterdam
,, 11	,,	London Oil Storage Co.	Valeria	55 casks	Lub.	1,980	Hamburg
,, 11	,,	Anglo-American Oil Co.	Elsie Marie	Bulk	Gas	589,530	Philadelphia
,, 11	,,	A. Brown and Co.	Albatross	100 brls.	Lub.	4,000	Hamburg
,, 12	,,	Mordaunt Bros.	North Point	22 brls.	,,	880	Philadelphia
,, 12	,,	Consolidated Petroleum Co.	Burgo. Petersen	Bulk	Gas	200,335	,,
,, 12	,,	,,	,,	Bulk	,,	830,000	,,
,, 12	,,	Joseph Barber and Co.	Valeria	53 drums 33 cases	Lub. Gr.	400	Hamburg
,, 12	,,	W. H. J. Alexander	Virgo	280 brls.	Lub.	11,200	,,
,, 12	,,	Produce Brokers	Grebe	25 brls.	M.Lub.	1,000	Antwerp
,, 13	,,	Anglo-American Oil Co.	Virgo	200 brls.	Lub.	8,000	Hamburg
,, 13	,,	A. Brown and Co.	,,	14 brls.	,,	560	,,
,, 13	,,	T. H. Lee	,,	10 casks 21 cases	M. Lub.	680	,,
,, 13	,,	J. Harrison	Ibis	6 brls.	Lamp	240	Antwerp
,, 13	,,	General Petroleum Co.	Bulysses	Bulk	Ref. Lamp	1,360,000	Kustendje
,, 15	,,	Mordaunt Bros.	Minneapolis	300 brls.	Lub.	12,000	New York
,, 15	,,	G. W. Sheldon and Co.	Redstart	1 cask	M.L. Grease	50	Antwerp
,, 15	,,	G. Jennings	,,	180 brls.	Lub.	7,200	,,
,, 15	,,	London Oil Storage Co.	,,	50 brls.	,,	2,000	Hamburg
,, 15	,,	T. S. Harris and Co.	Europe	195 brls	,,	8,000	Baltimore
,, 15	,,	J. Owen	Silvia	58 casks	Tar oil	2,660	Hamburg
,, 15	,,	G. W. Sheldon and Co.	Minneapolis	15 pks.	Lub. Comp.	760	New York
,, 15	,,	,,	,,	105 cases	Lub. Gr.	530	,,
,, 16	,,	London Oil Storage Co.	,,	200 brls	Lamp	8,000	,,
,, 16	,,	Scott's Wharf	,,	75 brls.	M.Lub.	3,000	,,
,, 16	,,	Asiatic Petroleum Co.	Spondilus	Bulk	Benzine	930,000	Pulo Samb'e
,, 16	,,	Anglo-American Oil Co	North Point	250 brls.	Lub.	10,000	Philadelphia
,, 16	,,	Mordaunt Bros.	Michail	26 pipes	R. Tar oil	4,480	Riga
,, 10	Liverpool	Liverpool Storage Co.	Victorian	223 brls. 36 ½-brls.	Lub.	9,640	New York
,, 12	,,	Meade-King, Robinson and Co.	Templemore	300 brls.	M.Lub.	12,000	Baltimore
,, 12	,,	,,	Merion	970 brls.	,,	38,800	Philadelphia
,, 12	,,	W. B. Dick and Co.	,,	200 brls.	Lub.	8,000	,,
,, 12	,,	A. Hopps and Sons	,,	375 brls.	M. Lub.	15,000	,,
,, 13	,,	Crew, Levick Co.	,,	910 brls. 50 ½-brls.	,,	40,060	,,
,, 13	,,	G. B. Taylor	,,	220 brls.	,,	8,800	,,
,, 13	,,	,,	Templemore	650 brls. 25 cases	M. Grease	27,000	Baltimore
,, 15	,,	Livrepool Storage Co.	Iceland	12 brls.	Lub. Comp.	480	Hamburg
,, 15	,,	W. Gibson and Sons	Winifredian	50 brls.	Lamp	2,050	Baltimore
,, 15	,,	Valvoline Oil Co.	Campania	30 casks	Lub.	1,230	New York
,, 15	,,	Burnaby and Chantrell	,,	55 brls. 40 ½-brls.	Lub. Comp.	2,910	,,
,, 15	,,	G. B. Taylor	Canada	1443 brls.	M.Lub.	57,720	,,
,, 16	,,	E. H. Kellogg and Co.	,,	100 brls.	,,	4,000	,,
,, 16	,,	Bramwell, Fern and Co.	Nyroca	100 brls.	,,	4,100	Antwerp
,, 16	,,	Meade-King, Robinson and Co.	Rutland	520 brls.	,,	20,800	Hamburg
,, 16	,,	Crew, Levick and Co.	Merion	30 brls.	,,	1,360	Philadelphia

MIDLAND RY-CARRIAGE & WAGON CO., LTD.,

Midland Works,

BIRMINGHAM.

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OIL & OTHER

TANK WAGONS,

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PACKED IN SEALED TWO GALLON CANS.

Universally used by all leading Motor Manufacturers, Motorists, Railway and Motor Bus Companies.

IN USE AND FOR SALE EVERYWHERE.

QUALITY TELLS.

To Dealers only.

DATE.	PORT INTO WHICH IMPORTED.	CONSIGNEE.	VESSEL.	PACKAGES.	DESCRIPTION OF OIL.	NUMBER OF GALLONS.	PORT WHENCE.
Jan. 16	Liverpool ..	Crew, Levick Co.	Merion	20 brls	M. Lub. ..	900	Philadelphia.
,, 10	Bristol ..	First Anglo-Russian Oil Co. ..	Juno	50 brls.	Lub. ..	2,260	Antwerp
,, 10	,, ..	H. R. James and Son	Exeter City ..	665 brls.	,, ..	26,600	New York
,, 11	,, ..	W. Smith and Co.	Llandaff City ..	330 brls	,, ..	13,200	,,
,, 11	,, ..	,, ...	,, ..	150 brls.	Lamp ..	6,000	,,
,, 11	,, ..	Ford and Canning	Exeter City ..	60 brls.	Lub. ..	2,400	,,
,, 12	,, ..	H. R. James and Son	Llandaff City ..	300 brls.	Min. Colz...	12,000	,,
,, 12	,, ..	,, ...	,, ..	385 brls.	Lub. ..	15,400	,,
,, 12	,, ..	Pickfords, Ltd.	City of Liverpool	13 pks.	Lub. Paste..	500	Hamburg
,, 12	,, ..	W. Smith and Co.	Llandaff City ..	25 brls.	Lamp ..	1,000	New York
,, 12	,, ..	,, ...	Chicago City ..	1835 brls.	Lub. ..	73,280	,,
,, 12	Cardiff ..	Guthrie, Heywood and Co. ..	Ld. Charlemont	180 brls.	,, ..	7,200	Baltimore
,, 11	Grimsby ..	J. Sutcliffe and Sons ..	Leicester ..	11 cases	,, ..	440	Hamburg
,, 10	Hull	W. Gillyott and Co...	Martello.. ..	1105 brls.	M.Lub. ..	44,200	New York
,, 10	,, ..	T. Wilson, Sons, and Co.	Cato	15 brls.	Lub. ..	600	Antwerp
,, 10	,, ..	,, ...	Martello.. ..	10 brls.	,, ..	400	Boston
,, 10	,, ..	,, ...	,, ...	675 brls.	,, ..	27,000	New York
,, 11	,, ..	,, ...	Bruno	20 casks	,, ..	800	Hamburg
,, 13	,, ..	Hull & Netherlands Steamship Co.	Swift	53 casks 40 drums	Tar oil ..	6,120	Rotterdam
,, 16	,, ..	T. Wilson, Sons and Co.	Bruno	13 casks	Lub. ..	520	Hamburg
,, 16	,, ..	,, ...	Juno	101 brls	,, ..	4,040	,,
,, 10	Manchester ..	W. Hodgson and Co.	Lestris	40 brls.	M.Lub. ..	1,610	Antwerp
,, 10	,, ..	Liverpool Warehousing Co. ..	Man. Commerce	120 brls.	,, ..	4,800	Philadelphia
,, 10	,, ..	G. B. Taylor	Terence	4928 brls.	,, ..	197,120	New York
,, 12	,, ..	Donald Currie and Co.	Westmoreland ..	6 casks	,, ..	180	Hamburg
,, 12	,, ..	Bramwell, Fern, and Co.	Tadorna.. ..	38 brls.	,, ..	1,760	Dunkirk
,, 16	,, ..	Diamond Lubricating Co.	Holnis	152 bls.	,, ..	6,080	Hamburg
,, 16	,, ..	,, ...	Man. Commerce	80 brls.	,, ..	3,200	Philadelphia
,, 12	Newcastle ..	Tyne-Tees Steam Shipping Co. ..	New Oporto ..	11 casks	Lub. ..	440	Hamburg
,, 13	,, ..	Furness, Withy and Co.	Benedick ..	827 pks.	M.Lub. ..	33,080	New York
,, 11	Southampton..	Barringer and Son	Snowflake ..	Bulk ..	Illum. ..	970,641	Philadelphia
,, 15	Aberdeen ..	R; C. Reid and Co.	Rubislau ..	7 pks.	Lub. Paste..	370	Hamburg
,, 10	Dundee ..	D. Alexander and Sons	Scalpa	6 casks	Illum. ..	240	,,
,, 11	Glasgow ..	J. D. Smellie	Tantallon ..	712 brls.	Pet. Spirit ..	35,600	Rotterdam
,, 15	,, ..	J. and A. Allan	Iberian	300 brls.	Min. Colz...	12,000	Philadelphia
,, 15	,, ..	,, ...	,, ...	1008 brls.	Lub. ..	43,520	,,
,, 12	Grangemouth	W. G. Yooll and Co.	Scalpa	150 brls.	Illum ..	6,000	Hamburg
,, 12	,, ..	J. Currie and Co	,, ...	373 bris.	Lub. ..	14,920	,,
,, 10	Leith	,, ...	Tortona	125 brls.	,, ..	5,000	,,
,, 11	,, ..	,, ...	Weimar	47 pks.	,, ..	1,200	,,
,, 13	,, ..	G. Gibson and Co.	Bonan	6 pks.	,, ..	200	Antwerp
,, 11	Belfast ..	Anglo-American Oil Co.	Excelsior ..	Bulk ..	Gas	839,595	Philadelphia
,, 12	,, ..	G. Heyn and Sons	Black Head ..	20 brls.	Lub. ..	800	Riga
,, 12	Dublin ..	Anglo-American Oil Co.	Excelsior ..	Bulk ..	D. Resid. Gas	19,798	Philadeldhia
					NET TOTAL	7,115,849	

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO JANUARY 16th, 1906.

IN GALLONS.

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COUNTRY.	ILLUMINATING.		LUBRICATING.		RESIDUALS.		GAS OIL. (Solar)		BENZINE.		FUEL OIL.		OTHER DESCRIPTIONS.		TOTALS.	
	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.
Austria ...	—	—	—	—	—	11,000	—	—	—	—	—	—	—	—	—	11,000
Belgium ...	240	240	19,420	33,350	—	—	—	—	—	—	—	—	—	406	19,660	33,996
Borneo ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Canada ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Germany ...	6,240	619,180	88,090	113,410	—	—	—	—	—	2,320	—	—	2,660	4,980	96,990	749,890
Holland ...	—	—	—	—	—	—	—	—	50,600	773,600	—	—	6,120	6,120	56,720	779,720
Roumania ...	1,360,000	1,360,000	—	—	—	—	—	—	—	—	—	—	—	—	1,360,000	1,360,000
Russia ...	—	2,488,590	800	800	—	—	—	—	—	—	—	—	4,480	5,410	5,280	2,494,800
Sumatra, &c	—	—	—	—	—	—	—	—	930,000	930,000	—	—	—	—	930,000	930,000
U.S.A. ...	987,691	5,589,541	754,490	1,851,570	419,798	430,198	2,459,460	5,009,920	—	—	—	—	24,000	46,000	4,645,439	12,917,229
Other Countries	—	—	1,760	1,760	—	—	—	—	—	480	—	—	—	—	1,760	2,240
	2,354,171	10,057,551	864,560	2,000,890	419,798	441,198	2,459,460	5,009,920	980,600	1,706,400	—	—	37,260	62,916	7,115,849	19,278,875

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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XIV. *(New Series.)* January 27th, 1906. No. 360.

Editorial Notes.

Petrol and its Future. The recent increase of one penny per gallon in the price of petrol, which was exclusively announced in last week's issue of the Review, appears to have caused much commotion in many parts—not among motorists but a certain portion of the writers in the press. A scribe in the *Daily Express* pictures a most gloomy outlook, and asks what would happen if the supply of petrol were to fail, or if England were to be blockaded. The average motorist, however, still rests contented, in spite of such pessimists. As a matter of fact, the future of petrol is quite safe, the supplies are practically unlimited, and even a constantly growing demand can easily be satisfied. It may appear all very well to argue that it is quite possible for petrol to reach a prohibitive price, but such an argument is illogical. Competition will be one of the great safeguards to the motorists, who, although he now has to pay another penny per gallon for his petrol, knows perfectly well that he still receives it at a much cheaper price than he did when he became initiated into the mysteries of a motor car and the fascination of motoring.

California and its Industry in 1905. The progress that brought California so prominently forward in 1904 has continued during the past year with the result that its petroleum industry has now reached the stage when it can be classed as important as that of any State or country of the world, while it is a foregone conclusion that during 1905 it will lead the world. The immense production of heavy oil in California has solved the problem of cheap liquid fuel on the Pacific coast and also shewn the possibilities of the establishment of a liquid fuel trade with this country. It is, perhaps, not well known that to-day there are almost 200 steamers, large and small, plying to and from San Francisco which use liquid fuel, while in order to extend the use of oil as a marine power, liquid fuel depôts have been established at various stations in Asia, in Alaska, and at the Hawaiian Islands. The important position which the Californian petroleum industry now occupies is therefore self apparent, even from a liquid fuel point of view. But in many other directions the Californian petroleum industry is making rapid progress. The refined product finds a good and ready outlet, and one of the characteristics of the past year has been the growth of the refining industry of the State. Here, too, the prospects are exceptionally bright for a successful future. Upon other pages of this issue we reprint a number of details concerning the industry during 1905, which are more than of passing interest, in view of the attention which English capitalists are now paying California.

The Austrian Refiners' Cartel. The Austrian refiners' cartel seems, according to latest reports, to be in a state of transition at the present time. At the end of December a meeting of representatives of the firms forming the Austro-Hungarian cartel took place in Vienna, at which the situation of the petroleum trade was considered. In view of the continued decline in consumption of illuminating oil in the country, a fresh reduction of six per cent. in the sale quota of the different refineries was proposed. With the reduction of 10 per cent. which has been in force for some months, and the further four per cent. which was agreed upon not long ago, this latest reduction brings the refineries down to 80 per cent. of their original quota. Much dissatisfaction has been caused thereby among the various firms, and the question has been seriously asked whether the time has not arrived to dissolve the cartel altogether. No decision has, however, yet been arrived at on this subject.

Looking Ahead for Fuel. By becoming the sole owner of the Midway oil field in Kern county, California, the Santa Fe Railroad Co. has evinced its faith in the perpetuity of the oil industry of California, as well as shewing to the world its belief in the immense advantages which liquid fuel possesses over coal. All along, the Santa Fe Co. has been most progressive so far as the use of liquid fuel was concerned, and even in the early stages of the development of the Kern River field, it began the conversion of its locomotives into oil burners, until at the present time we believe we are correct in stating that all its locomotives running westward from New Mexico are run exclusively upon oil. The possession of the oil field—pronounced to be one of the best in California—gives the company absolute control over its own fuel, and relieves it from the necessity of being dependent upon any other source of supply, or on the fluctuations of the oil market.

An Important Oil Ruling. The official announcement has been promulgated by the Government inspector in Indian Territory that an amendment has been made to the regulations governing all oil and gas leases in the Cherokee and Creek Nations. The ruling, which has been approved and is now in force, prohibits oil and gas lessees from drilling closer than 150 feet to another lease, allotment, or unalloted land. This action was taken, so it is explained, to prevent the lessees on lands putting wells down within a few feet of another line, and draining the oil from under adjoining land, thus causing the owners of allotments and lessees who have not had their leases approved to suffer through the greediness of those more fortunate in securing an early approval of leases. It is expected that this order will do away with much of the line drilling, in many places the rivalry having become so bitter that rigs on adjoining leases almost touch each other. It is a great pity that a similar ruling has not been made ere this in many other oil fields in America.

RETIREMENT OF MR. W. J. YOUNG, OF PITTSBURG.

(FROM OUR AMERICAN CORRESPONDENT.)

Mr. W. J. Young, vice-president and managing director of the South Penn Oil Co. has retired from active participation in the oil producing business, after a continuous service in business for almost 50 years.

Mr. Young began business in Pittsburg early in 1856, at the hide and leather house of John R. McCune, in Liberty Street. In 1873, he was appointed bookkeeper of the Oil City Savings Bank, and later elected cashier of the Oil City Trust Co., being advanced from that position to the office of vice-president and afterwards president.

While connected with the Oil City Trust Co., Mr. Young became a partner in the firm of Vandergrift, Pitcairn and Co., owners of the united pipe lines and producing oil properties. He had charge of the production of the firm, which later formed the nucleus of the Forest Oil Co. The removal of the offices of the Forest Oil Co. from Oil City to Pittsburg, necessitated his return to this city in 1889, and he was the vice-president and general manager of that company, continuing in charge of it until it was sold to the South Penn Oil Co., in which company he has held the offices of vice-president and general manager since early in the year 1902. Mr. Young has always been a hard worker in any part of the business in which he has engaged, and his associates will miss his counsel. In addition to his connection with the South Penn Oil Co., he has been the president of the Prairie Oil and Gas Co., the Humboldt Natural Gas Co., the Washington Oil Co., the Taylorstown Natural Gas Co., and the South Penn Beneficial Association. He has been the vice-president of the Marion Oil Co., the New Domain Oil and Gas Co., the Hope Natural and Reserve Gas Companies, as well as a director in all of the foregoing companies, and also in the Hazelwood Oil Co. He relinquishes his offices in the several companies, with the exception of the Prairie Oil and Gas Co. and the Humboldt Natural Gas Co.

To mark Mr. Young's retirement from the vice-presidency and active management of the South Penn Co., his associates have presented him with a solid silver loving-cup, nearly two feet in height, mounted on an ebony base.

BATOUM EXPORT TRADE IN DECEMBER.

Shipments from Batoum during December were unusually small, both owing to the meagre stocks and to the abnormal conditions of the trade. During the 28 working days of the month there was shipped scarcely 764,000 poods of various oils, and this included 607,000 poods of kerosene (591,000 poods in bulk and 25,000 poods in cases). At the beginning of the month an important deal was made public amounting to the sale by the committee of the refiners' combine to Nobel of 2,000,000 poods of kerosene, the whole of the available stock in their tanks. After this sale there was no more kerosene available at Batoum. At the time of writing arrivals of oils from Baku had entirely stopped owing to the railway strike. Prior to that date two or three firms were receiving, at irregular intervals, small quantities amounting in all to about 60,000 poods per week.

The small exporters have been doing little trade in case oil, selling it to Turkish buyers at 1 rouble 80 copecs per pair of tins; later the price advanced to 1 rouble 90 copecs and 2 roubles. Among a section of the workmen the idea has been mooted of leasing one of the large case factories and working it for their own account, but no steps have yet been taken towards the realisation of this. The reopening of the case factories in the ordinary course is not expected for a long time to come.

The stocks of lubricating oil are entirely exhausted. The steamer "Apscheron," which was expected at Batoum on the 2/15 January for lubricating oils, could only get oil to fill two tanks, going for the rest to Novorossisk. There is still a fair quantity of solar oil left in stock.

THE GERMAN OIL FIELDS.

Whilst in the principal oil fields at Wietze and Steinförde operations are now proceeding in a fairly regular manner, surprises are now and then coming in in the form of oil strikes in new localities. Quite recently the Celle-Wietze Co. have struck a heavy oil in two boreholes on the Hornbostel tract.

A report is also to hand of the conclusion of boring contracts for the Gnarrenberger Moor; it is further reported that a light crude oil has been found in this locality at a depth of 78 metres. From Wiesen and Hoefel, on the river Aller, comes the report that the owners of petroliferous land in new leases for borings are raising their royalties from 3 to 5 marks per barrel.

It is stated on good authority that great developments are about to take place in the German petroleum producing industry. The formation of a large joint stock company is spoken of. A movement is now in progress among the petroleum producers to combine into groups and form larger concerns, which would result in more economical and more efficient working, to the great advantage of the industry as a whole.

The price which the Internationale Bohrgerellschaft paid for the business of the Hannoversch-Westfalersche Erdoelwerke Co. is 4,886·000 marks.

NOVEMBER'S AVERAGE BAKU PRICES.

After a long delay we are now in posession of the of the official statement by the Baku Exchange Committee of the average prices for petroleum products at Baku in November, which were as under:—

	Copecs per pood.
Light Crude in Black City	20·8
Crude Oil at the wells	20·5
Crude Oil in tank waggons or ships	24
Residuals in ships	24·3
Kerosene in ships	28·4

The November average prices in 1905 compared with those for November, 1904, as follows:—

	Copecs. 1904.	Copecs. 1905.
Light Crude in Black City	14·2	20·8
" " "	14·7	20·5
Residuals in ships	15·0	24·3

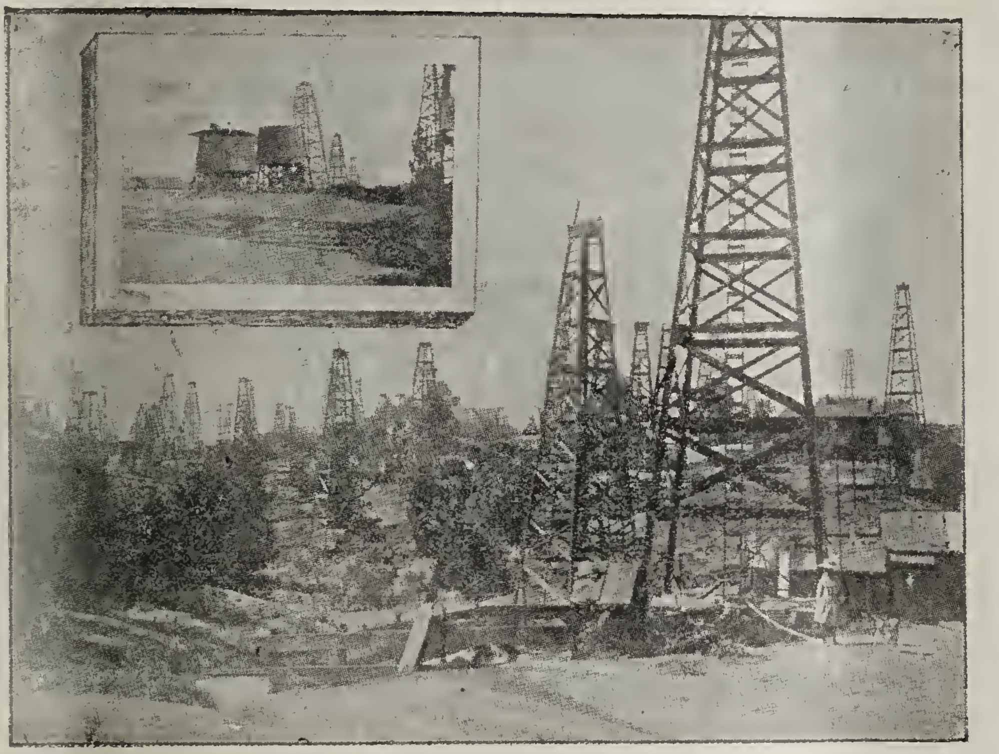
The Californian Petroleum Industry in 1905.

GREAT DEVELOPMENTS.

The developments which have taken place in the Californian petroleum industry are tersely dealt with in an article which appeared in a recent issue of the *Los Angeles Times*. The writer sums up the situation at the commencement of his article by stating that "petroleum as an industry has made great advances during the past year in California. While new fields continue to come to the front, it is not so much in this that the chief interest lies, but in the new markets which are being opened up almost every day, and in the increased use of oil in the markets already controlled by liquid fuel."

The writer then proceeds to recall the fact that five years ago oil as fuel was almost unknown outside of Russia. Since the discoveries in California and Texas, the Southern Pacific has adopted it everywhere except in Utah and Nevada, where the influence of the great coal companies has forced the use of "black diamonds."

The Santa Fe Railway is using it from Albuquerque to San Francisco, and its use in Kansas is probably only a question of time. By its introduction on the Mexican Central Railroad last year, the reign of oil fuel in the industrial life of the southern republic has begun.



A Locality that Trebled its Output of Oil in 1905.

In California, scarcely a scuttleful of coal is sold except for domestic service, smelters, and foreign vessels. The completion of the Salt Lake Railroad, whose engines burn oil as far as Las Vegas, added thousands of barrels to the monthly consumption last year. The Bullfrog-Goldfield extension, if oil is not barred there through hostile coal influences, means still more in the near future. The Borax Smith Railroad is certain to use oil, and so is the Santa Fe's new Arizona line. The adoption of oil by the North Shore Railroad has added more thousands of barrels to consumption, and the building of the Ocean Shore electric line from San Francisco to Santa Cruz means still more.

The hundreds of pumping plants for irrigation purposes that are being established in Southern California—on the deserts, in the citrus belt around Los Angeles, and throughout the San Joaquin Valley—also mean more oil—crude, if steam is used—distillates, if gasolene or similar engines are operated. In turn this growth of agriculture, the basis of all industries, means more business and increased rolling stock and motive power for railroads and new industries to supply the increased farming population, all of which means an increased demand for oil, as does practically every possible extension of any line of human activity.

Oil has made great headway in competition with coal in Washington and Oregon during 1905, despite sharp competition. The Associated Oil Co., just entering this field, has already contracted to furnish the Oregon Railway and Navigation Co. with fuel to displace coal. This example is practically certain to be followed soon by other railroads in the North-west. On the Columbia River, Puget Sound and other waters of the north, oil has replaced coal on a number of steamers during the past year. In California, as in Alaska and Hawaii, oil is delivered by tank steamers on the free waters of the ocean, where no hostile railroad tariffs can be invoked against it. During the year 1905, for the first time, serious efforts have begun to introduce Californian crude oil into the foreign fuel markets. For this business South America and the Orient afford an almost unlimited field. For over a year the Associated and Union companies have had representatives in these parts making contracts, ships have been purchased abroad, and the Associated has officially announced that some $3,000,000 will be expended during the next twelve months for the extension of trade.

To-day, railroads are being built over the Andes, factories are being established with modern machinery, ancient cities of South America are getting electric lights, street cars, water and gas works, mines are being worked, for all of which fuel is needed, and whatever deposits there may be in the country, it will take time to develop them, so that meanwhile California may expect to supply much of the demand. Oil can be piped to tidewater, and loaded for 25 cents a barrel at Port Harford, Monterey, or San Pedro, and four barrels are equal to a ton of the best coal, to say nothing of its superior cleanliness and greater economy of storage and handling.

The close of the Russo-Japanese war means a great industrial awakening all over the Orient. Japan's deposits of coal and oil are unequal to more than a fraction of the demand for fuel, and China's resources are scarcely even known. American refined products, handled by the Standard Oil Co., have already captured the Oriental market, and have driven Russian oil entirely from the field. These goods are almost all from the Point Richmond refinery, and are manufactured from Coalinga, Kern, Santa Maria and Newhall crude oils. What the Standard has done with the manufactured product the Associated and the Union hope to do with the crude fuel.

During the year extensive experiments have been carried on with a view to using petroleum for steel manufacture, which, if successful, will mean much for the entire Pacific coast. Other experiments are constantly made in the hope of inventing some means of using oil in place of coke in smelters.

The past year has witnessed a big increase in amount of road surfaceing work throughout the entire State. More attention has also been paid to the quality of the oil used, its percentage of asphalt, freedom from water and impurities, the preparation of the soil and method of application.

A decision just rendered by United States Judge Wellborn, declaring invalid the patent of the Dustless Roads Co., is certain to encourage this branch of industry. This company has for years claimed exclusive rights in this line, and demanded a royalty on all work, so that there was a constant menace to municipalities using oil on roads. Unless appealed and reversed the decision puts an end to that.

During 1904 California was second only to Russia in production of petroleum, that country and the United States having 90 per cent. of the world's output. While no figures are yet available for Russia, it is quite safe to say that the havoc wrought at Baku has cut the production of the Czar's domain down 50 per cent., and that California now leads the world.

The features of the year have been the rapid rise of the Santa Maria district, in Santa Barbara county, and of the Salt Lake field west of Los Angeles' city limits, and the rapid course of the extinction of the Los Angeles city field, the end of which seems certain to come within a few months. The Santa Maria field has trebled its output, and is estimated to have produced 3,600,000 barrels. The Salt Lake wells are estimated by the Associated Oil Co. to have about the same production.

Kern River has been pumping steadily, but since the Associated's acquisition of the Coalinga pipe line, it has been turned practically over to the railroads and its product taken off the general market. McKittrick has been shut down nearly five months of the year, while Sunset has increased its output. South of the Tehachepi, the smaller fields have pumped to only a part of their capacity.

In 1904, the State's output was a little over 28,000,000 barrels. Last year it may have reached 30,000,000, but when the full figures are in it may be shewn to be less, the figures being of course no evidence of what can be produced when needed.

Five-sixths of the State's production is within 160 miles of Los Angeles, or nearer to this city by 100 miles than to San Francisco. One-sixth or more is produced within 40 miles of its limits.

During the present year there may be some great developments predicted. The future of Kern River as to amount of output is a problem. It is not likely that it will ever exceed its record of 17,500,000 for 1904. The Standard has ceased entirely to buy here except on long-time contracts, made years ago. Its great pipe line is piping oil south from Mendota, the junction of the Coalinga branch with the main line, only by sending Coalinga light to Bakersfield, mixing it with the heavy Kern crude, to reduce the latter from 14 to 22 degrees gravity, and then sending the mixture to Point Richmond. The Kern product, moreover, is a poor refining article, although the best locomotive fuel known.

That fuel oil is going up, however, is shewn by the contract which the Associated has recently made with the Espee for 15,000,000 barrels at 35 cents at the well. The price under the last contract was 27½ cents, and the amount 10,000,000 barrels. With the increase a better rate may perhaps be offered the small producer.

A factor to be reckoned with during 1906 will be the Midway district, declared by some competent authorities to be fully equal to any in the State, but which, owing to the large output and low price, has remained shut down and without transportation facilities for years. Its wells are entirely free from water, and the drill has passed through stratum after stratum of the richest sands. The product is lighter than that of Kern River, but heavier than most of that found in Santa Maria, ranging from 16 degrees to 22 degrees gravity, most of it being 16 degrees to 18 degrees, and all an excellent fuel.

During the last year the Santa Fe Railroad Co. has bought an half interest in the immense holdings of Chanslor and Canfield in this district, and made a contract for fuel at 35 cents a barrel. An extension of the Sunset Railroad has already been surveyed, and will doubtless be built into the heart of Midway by the end of 1906. There are already not less than 40 finished and tested wells, and the output will be enormous from the start. The oil, moreover, can be piped with ease, and a route has already been surveyed for a line to the coast.

In the eastern part of San Luis Obispo county, just west of the Mount Diablo range, lie what are popularly called the Cuyama, Carisa and Elkhorn valleys, where oil indications abound. Long isolated from railroad communication, this region has been little prospected, but during the past year the Recruit Oil Co., a branch of the Associated, has placed locations on thousands of acres, and is expected to test the ground to the limit.

At Casmalia, on the Southern Pacific's coast line, that corporation has drilled a well that at 2,700 feet produces an oil of about 7 degrees gravity, so heavy that it sinks in water. It burns well, but is so hard to handle that it has never yet been used, although if enough should be found, it might be mixed with lighter oil. It flows when heated, and may perhaps be used for roads. Doubtless in time some use will be found for it if there is enough of it.

On the coast near Arroyo Grande 20 miles north-west of the Santa Maria district, 14 degrees gravity oil, similar to the Kern River product, has been found in a well drilled at Pismo Canyon, and the Associated has bought 22,000 acres immediately adjoining. This land comes to within two miles of the ocean, and is within sixteen miles of Port Harford, so that the importance of the find, if it proves extensive enough, cannot be overestimated. It is too soon, however, to predict, but it may be stated that the surrounding country has been prospected in former years without definite results.

In Monterey, San Benito, and other northern counties, some prospecting is being carried on. Light oil has been found at Half Moon Bay and Watsonville, and in Monterey county 45 deg. gravity oil has been developed.

In Inyo county, near Owens Lake, the Roosevelt, an Oakland and San Francisco company, is drilling prospect wells, one having been abandoned without results and another begun. Another company that is about to prospect on the desert is the Occidental, a corporation with large holdings at Sunset, that has recently acquired lands near Randsburg. Another, the Loma Vista, is drilling on the desert in San Diego county.

In Arizona, during the past year, there has been a number of companies formed to prospect. Drilling has been going on near Solomonville, Stafford and Prescott. Good indications are said to be found near the site of the Tonto dam. So far, however, not a barrel of commercial oil has yet been produced on the Pacific coast of the American continent or west of Colorado and Wyoming outside of California, except in Alaska and parts of Peru, where the output is small.

Some oil has recently been found near Carlsbad, N.M., but no commercial results have been achieved so far. In Nevada, rumours have come in from time to time of the discovery of strong oil indications near the new mining districts, and at least one company is known to have been formed to prospect.

In Northern Mexico, some prospecting is being carried on in the State of Chihuahua, on the proposed line of the Stillwell Railroad.

More than $8,000,000 in dividends have been paid by the oil industry of California, and practically all this amount has been paid during the last six years. This does not in any way include the revenue derived by the Standard from its business on this coast. Moreover, by far the greater part—probably 90 per cent. - of this sum has been made from fuel oil, from a product that is of but little use for refining purposes.

Petroleum represents to-day one of the foremost industries of California. In the opinion of experts this means more for the State's future than all the gold mined. It means cheap fuel and power; it means manufacturing plants, railroads and steamers at small cost, with the accompanying expansion of trade increase of population, and lucrative employment for thousands of people.

To Los Angeles it means much in particular. The city is the natural centre of the oil industry of the Pacific coast, besides having its many growing industries to foster, that need the stimulus of cheap fuel. It is surrounded by great fields, such as Whittier, Fullerton, and Salt Lake, all within a distance of 20 miles. Other fields are found on every hand, within a few hours' ride. The great fields of Santa Barbara are within the city's natural territory, and those of Kern county are nearer to the Angels' City by 150 miles than to San Francisco. Every day sees them entering into closer relations. To Los Angeles thus falls the honour of being the oil metropolis of California.

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THE OIL TRADE IN THE PHILIPPINE ISLANDS.

The British Consul at Manila states that practically the whole of the oil trade of the Philippine Islands is divided between the United States and Russia, and consists of kerosene and other oils. Russia first appears direct in 1892, with a total import of products to the value of £49,731 as against £27,449 for the United States. The next year, however, the imports from the United States came to £146,406, while imports from Russia only reached £52,391. Thenceforth Russia held the lead up to 1902, when American oil exceeded by £27,131. Their respective imports last year were United States £84,790, Russia £70,092.

THE PRODUCTION OF JENNINGS IN 1905.

During the past year the Jennings oil field has produced 10,127,822 barrels of oil, as against 6,575,527 barrels in 1904, an increase of 3,552,245 barrels. Only 27 wells were drilled in the field during the twelve months, yet production remained at a high level throughout the year. The companies now operating in the field have drilled a total of only 96 wells, and as the district has put out more than 16,700,000 barrels of oil in the last two years, it is entitled to rank as the most remarkable development in the gulf coast oil region. Thirty-three wells were abandoned at Jennings during 1905. Some of these were in the old territory and had exhausted the sand in which they were completed. The new territory at Jennings is deep, the sand being found at 1,900 feet.

The year was important in that it witnessed the completion and operation of a pipe line affording an outlet to deep water on the Mississippi River. The line is 60 miles long and is owned by the Evangeline Oil Co. It extends to the Atchafalaya River, where the oil is delivered to barges and transported to Plaquemine, on the Mississippi.

Another important event was the starting of work on a pipe line westward toward Beaumont. The Texas Co., which is laying this line, will build it as far as Lake Charles, La., a distance of thirty miles, where it will deliver oil to the Kansas City Southern railroad. At present the Southern Pacific is the only railroad on which shipments of Jennings oil are made. It is believed that the Texas Company's line will eventually be extended to the Beaumont district, which will give it a connection to the Texas Company's refinery and deep water at Port Arthur.

Shipments of Jennings' oil in 1905, says the *Oil Investors' Journal*, amounted to 7,334,614 barrels, of which 6,131,766 barrels went by rail—1,177,462 barrels of this amount being train-load shipments for delivery to the pipe lines and tanks of the purchasing companies in the Beaumont-Port Arthur-Sabine district—and the balance by pipe line and barges to the Mississippi River. Probably 1,000,000 barrels should be allowed for waste and evaporation, sediment and water, as the Jennings oil is handled almost entirely in open earthen tanks, upon which the sun and the elements have free play. Field consumption is put at 140,000 barrels for the year, making the total consumption and loss 8,474,614 barrels. This would indicate that the surplus for the year was 1,653,208 barrels, which, added to the estimated net stocks on hand December 31st, 1904, would make the present net stocks 5,323,208 barrels.

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The Water Flush System.—It is expected that shortly the Roumanian Minister of Domains will issue a decree regulating the use of water flush boring systems at the Roumanian oil fields.

Petroleum Tax Revenue.—The revenue derived by the Roumanian Government from the tax on petroleum in November amounted to 363,593 francs, against 347,834 francs in November, 1904. The revenue from this source in the eleven months of 1905 amounted to 1,728,034 francs, against 1,665,740 francs in the eleven months of 1904.

Oil and Gas Development in the Mid-Continental Field in 1905.

By ERASMUS HAWORTH, of the United States Geological Survey.

Geography and Development.—The term "mid-continental field" applies to the oil and gas fields of Kansas, Indian Territory, and Oklahoma. The area may be defined approximately as follows:—From Kansas City draw a line westward to Lawrence, Kansas, a distance of about 40 miles; thence south and west, by way of Ottawa, Moody, Toronto and Sedan to the south line of Kansas; continue in the same general direction to Cirmarron River in the Indian Territory; from there extend the line nearly south-east by way of Sapulpa to Muskogee, and thence in a general north-easterly direction by way of Chelsea, Vinita, and Oswega back so Kansas City.

Outside of this area a number of outlying discoveries have been made; such as gas at Arkansas City and Newkirk; and oil and gas near Ardmore in the Chickasaw Territory. The Arkansas City Newkirk field is evidently about the same geologically as the large field; but the exact geological conditions about Ardmore (and a few other places where traces of oil and gas have been found) have not yet been thoroughly worked out.

Development during 1905 has extended the fields by only a small area. More gas has been found at Arkansas City than was thought to exist. The heavy developments about Pawhuska, in the Osage Territory, and in the oil fields of Cleveland, Oklahoma, and the shallow oil about Alluwe and Coody's Bluff, are the principal additions for the year, although small developments were made in all these places at an early date.

In Kansas, the only developments of note were in the vicinity of Paola and Rantoul. A somewhat unexpected development of shallow oil has been made about Paola; it was unexpected because much drilling for gas had been done previously without uncovering oil pools. Rantoul is a little village on the Missouri Pacific railroad, between Ossawatomie and Ottawa. Early in the year a number of wells were drilled there, which, almost without exception, produced either oil or gas in paying quantities. At present, a nice little field of shallow sand is developed, producing fair quantities of both oil and gas. This seems to be a south-west trend of the Paolo-Ossawatomie field. The pay sand lies at varying depths, from 350 to 600 feet or more.

Alluwe, in the Cherokee Nation, is a little village which until a few months ago consisted of some half-a-dozen houses, including a little country store, or trading post. This was the former home of the Delaware chief, Little Foot, and the present home of his son-in-law, Mr. Campbell, who now has a princely income from royalties on oil leases. Two or three years ago, two prospect wells were put down ostensibly for water. Each of them struck oil sand at about 500 feet, and the wells stood full of oil for two years or more. When leasing in the Cherokee Nation began in earnest a year and a-half ago, information about these wells leaked out, and leases in that vicinity soon came to a premium. The old lease of the Cherokee Illuminating Oil Co., covering 12 square miles, lies six miles south of Alluwe. Development has proved a north-and-south trend, reaching all the way from the old lease (or "big lease," as it is generally called) to Coody's Bluff, ten miles north of Alluwe, forming a north-and-south trend known to be from 15 to 18 miles long. Here oil of good quality is found at depths varying from 300 to 650 feet. In daily capacity, the wells range from 10 to 500 barrels; most of them flow from one to six weeks without pumping. This is the most important shallow sand territory yet developed in the entire mid-continental area.

At Cleveland, the oil sand is very deep (around 1,900 feet), with slight variations in different wells. The production ranges from 25 to 300 barrels per well initial capacity, making this an important oil pool.

Another new pool opened entirely in 1905, is located to the north and west of Dewey, four miles north of Bartlesville. The first development here was made by Messrs. Stubbs and Low, early in the year, on a lease lying one and a-half miles north-west of town. The oil sand averages 1,400 feet below the surface; although a shallower sand, about 800 feet down, is a small producer in some of the wells. From this original development, in almost all directions new wells are often brought in. Early in November a well two or three miles south-east of Dewey started flowing at the rate of 1,000 barrels per day; at the end of a week it had settled to 450 barrels. A few good producers have been brought in still further north-east toward the Kansas line; but up to the close of the year there is left an unexplored zone nearly 10 miles wide between the developed area and the southern Kansas line, with good reasons for believing it may become as productive as any area yet developed.

The most extensive development throughout the year was in the areas fairly well proven during 1904. From the vicinity of Bartlesville southward, along the extreme eastern line of the Osage territory, a surprisingly large number of strong wells were brought in. A number of them have begun flowing at the rate of 1,000 barrels per day, and have held weeks before dropping to 500 barrels. For matters of convenience, holders of the blanket lease on the Osage lands divided the eastern area into three north and south columns, approximately three miles wide per column. East and west lines were now drawn half-a-mile apart; each sub-area is called a "lot," and is numbered from the State line southward to the south side of the territory, a distance of 58 miles making 116 lots in each tier. Practically all the land extending from Bartlesville to lot 70 or 75 is proven territory, with richer areas in certain places. Lots 44 and 45 are excellent, with another rich pool about lots 51 and 52; the richest of all is in the vicinity of lots 61 to 67. Here it seems almost impossible to find a dry well; numerous wells had initial capacities above 300 barrels per day. West from this immediate area, on the middle tier of lots (that is, lots 169 to 172), there is also a productive area; and still west on the third tier (that is, lots 293 to 296), and in parts of township 24, range 10, still further west, excellent oil pools have been developed. It seems probable that here is an east and west trend reaching from the east side of the Osage leases westward, a distance of 15 miles. The north and south development from Bartlesville to lot 68 is another stretch of excellent land, 18 miles long. East of the territory line, and within the Cherokee land in the vicinity of Ramona, a number of dry wells have heen drilled, implying a limitation of the field on the east side.

Outside of the richest areas already described, other excellent pools have been developed in part. Thus, a zone reaches west and a little north from Bartlesville over into Range 10, which is dotted here and there all over with good wells. To the southwest across the river north from Cleveland, a number of good wells are found; again in the vicinity of Pawhusky, both oil wells and gas wells are found, which implies a profitable area. The development in different parts of the Indian Territory has been greater than to the north in the State of Kansas; due in part to better wells, and in part to legal considerations to be explained later.

In Kansas, development was not great during the past year. The Chanute-Humboldt pool, the Bolton pool, the Coffeyville pool, the Tyro pool, and the Caney pool were tolerably well defined before the close of 1904; then a severe winter came on, and just at the beginning of milder weather the price of oil dropped so low that producers had no incentive to drill. In fact, for about six months (from February to July inclusive) it was impossible to market more than a small fraction of oil which might have been produced from the wells drilled. As a result, surprisingly few wells were drilled in Kansas. Chautauqua county witnessed more drilling than any other part of the State outside of Paola and Rantoul, already mentioned; partly because the grade of oil was highest here and commanded the highest market price; and further, on account of less uncertainty in drilling. Three miles straight south from Sedan, the county seat, is a pool known as the Huffman pool. Oil is obtained there at from 1,050 to 1,250 feet; the wells range from 20 to 256 barrels initial capacity, many of them making 75 barrels after months of pumping. Two miles to the east, and from two to six miles south of the Huffman field, is an area trending north and south, about two miles wide and reaching down to the State line, commonly known as the Blundell-Spurlock area. This was the first developed in Chautauqua county outside the immediate environs of Peru; on the whole it has proven to be a rich field. Immediately south of Peru about three miles is another pool developed during 1905, known as the Scott pool. There are nearly 40 wells along a north-and-south line about two miles long, with dry wells on the east and light gas wells on the west. There seems to be a north and-south trend of gas territory between this and the Blundell-Spurlock pool.

Production.—The production for the year 1905 is about 12,000,000 barrels. The table given herewith shews the total production by months of the entire area, as bought by the Prairie Oil and Gas Co., and according to their monthly report, it exhibits the total runs daily; the average of the same; total deliveries to refineries; daily average of same; total put into tanks; daily average of same; and finally, total stocks on hand at the end of the year, and for each month during the year.

TABLE SHEWING MONTHLY PIPE LINE RUNS OF THE PRAIRIE OIL AND GAS COMPANY—MID CONTINENTAL AREA.

	January.	February.	March.	April.
Runs ..	793,648·03	564,482·12	695,908·03	549,338·50
Daily Aver'g	25,601·55	20,160·08	22,448·65	18,311·28
Deliveries..	315,426·12	292,648·65	249,563 74	241,251·98
Daily Aver'g	10,175·04	10,451·74	8,041·73	8,041·73
Put in Tanks	478,221·91	271 833·47	308,086·52	308,086·52
Daily Aver'g	15,426·51	9,708·34	10,269·55	10,269·55
Total Stocks	5,655,672·22	5,912,207·43	6,327,923·47	6,657,926·10

	May.	June.	July.	August.
Runs ..	784,228·69	715,396·93	1,090,999·86	1,112,912·48
Daily Aver'g	25,297·70	23,846·56	35,193·94	39,126·21
Deliveries..	219,065·05	185,888·80	206,155·47	279,391·38
Daily Aver'g	7,066·61	6,196·29	6,650·18	9,012·63
Put in Tanks	563,163·64	529,508·13	884,844·39	933,521·10
Daily Aver'g	18,231·09	17,650·27	28,543·36	30,113·58
Total Stocks	7,256,627·71	7,573,535·71	8,265,004·09	9,213,215·98

	September.	October.	November.	December.
Runs ..	1,203,302·03	1,380,208·19	1,355,011·72	1,509,325·60
Daily Aver'g	40,112·07	44,522·44	45,167·06	48,687·28
Deliveries..	318,863·79	209,093·95	416,476·31	684,642·97
Daily Aver'g	10,628·79	6 744·97	13,882·54	22,085·22
Put in Tanks	884,498·24	1,171,114·24	938,535·41	824,683·00
Daily Aver'g	29,483·28	37,777,87	31,284·52	26,602·21
Tot. Stocks	10,618,676·23	11,585,178·00	12,346·832	13,100·027

To these should be added a small amount consumed by the independent refineries at Humboldt, Paola, Cherryvale, etc.; and the still smaller amount used as fuel and lubricating oils, which may be estimated at from 100,000 to 125,000 barrels.

It will be noticed that, beginning with July, the monthly runs exceeded 1,000,000 barrels, and that for the last three months it exceeded one and one-third million; so that 1905 turns over the industry to the new year on a basis of more than 16,000,000 barrels annual production. Of this amount, much more than one-half came from the Indian Territory; but at the present an exact division cannot be made. Presumably, however, not more than one-third of it came from Kansas.

The extra development in the Indian Territory, as already explained, was due in part to stronger wells and less uncertainty in drilling. But another very important factor is the legal status of leases on Indian lands. The Secretary of the Interior requires a certain form of lease, one clause in which specifies that at least one well shall be drilled by the end of the first twelve months after the lease is approved. This has been the most important factor in forcing drilling. The Secretary is of the opinion that he is best serving the cause of the Indian by giving him royalties from oil wells as rapidly as possible. It is generally believed that the low price of oil is due to the great excess of development over consumption. According to the table given, the Prairie Oil Co. has 14,000,000 barrels of oil stocks stored, here and there, throughout the oil-producing territory and at the Sugar Creek refinery near Kansas City, with an increase of nearly 40,000 barrels per day. With the entire area controlled by one good business head, development would be stopped until the stocks had decreased greatly and the price of oil advanced; but with the Secretary of the Interior insisting on the "development clause," no one cares to jeopardise the title of valuable leases by declining to drill; therefore the price goes downward, and production continues to increase.

(To be concluded.)

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{11}{16}$-$\frac{13}{16}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	3/9-4/3
,, ,, ..	£650,000 5½% Pref.	£1	6/9-7/9
Californian Oilfields	£250,000 Ord.	£1	6½-6⅝
European Petroleum.. ..	£550,000 Pref.	£1	$\frac{3}{16}$-$\frac{5}{16}$
,, ,, ...	£550,000 Ord.	£1	1/0-2/0
,, ,, ...	£376,000 Deb.	£100	87-90
Russian Pet. & Liquid Fuel ..	£500,000 6½% Pref.	£1	13/6-14/6
,, ,, ...	£600,000 Ord.	£1	14/0-15/0
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	3⅝-3⅞
,, ,, ...	£575,000 Ord.	£1	9/6-10/6
Shell Transport & Trading ..	£2,000,000	£1	22/0-23/0
,, ,, ,, ..	£1,000,000 Pref.	£10	9¼-9½
Spies Petroleum Company ..	£312,500	10s.	8/3-8/9

SCOTCH COMPANIES.

Supplied by Messrs. MACLEAN AND HENDERSON, STIRLING.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. 8½ pd	£199,750	£10	18⅛
Do. 6% Cum. Pref. ..	£100,000	£10	12$\frac{1}{16}$
Burmah Oil, Ord.	£1,100,000	£1	58s. 0d.
Do. Pref.	£250 000	£1	24s. 9d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	8½
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	18
Do. New (£8 10s. pd.)	£131,750	£10	16¼
Pumpherston Min. Oil Co., Ld., Ord (17s. paid)	£110,500	17s.	81s. 0d.
Do. 6% Cum. Pref.	£100,000	£10	12¾
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	37s. 6d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	65s 0d.
Do. "B" Deb...	£150,000	£100	150

RUSSIAN COMPANIES.

Company.	Nom. Value in Roubles.	Quotations on Jan. 20.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	422	425
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	3,800	3,850
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	--	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	173	175
Naptha Trading Co., Petrol.	250	—	—
Nobel Bros.	5,000	8,600	8,650
,, ,, ...	250	—	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

DUTCH COMPANIES.

Company.	Quotations Jan. 24th.	Quotations Jan. 10th.	Florins.
Arnhemsche Petroleum Mij. ..	81	81	1,000
Dordtsche Petroleum Mij. (Pref.) ..	126	126	500
,, ,, ,, (Deb. 4½%)	102¾	102¾	1,000
Elzasser Petroleum Mij.	44½	44	1,000
Gaboes ,, ,, ...	19¾	19¾	—
Holl. Rumeensche Petroleum Mij...	22	21⅝	1,000
Int. Rum. Pet. Mij.	91	91	500
Java Petroleum Mij...	30	30	1,000
Koninklyke Nederl. Pet. Mij. Shares	390⅝-392	395	250-1,000
,, ,, Share certificates	394½	398	1,000
Mœara Enim Petroleum Mij. ..	108½	108½-109½	100
,, ,, 1-1,000 Oblig. 5	102	102¾	250-1,000
"Moesi Ilir" Petroleum Mij. ..	32½	34½	—
Nederl.-Rumeensche Petroleum Mij.	15⅞	16	
Nieuwe Ned. Petroleum Mij. And...	55¼	55¼	1,000
Oliebronnen in Hannover Mij. ..	182	149½	—
Panolan Maatschappij Cert. ..	350½	350½	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	137½	136	1,000
,, ,, (Common) ..	93	93½	—
Sumatra-Palembang Petroleum Mij	59	59	500

PATENTS.

Applications for Patents and Patent Applications recently published relating to the Petroleum Industry.

Specially contributed by Messrs. EDWARD EVANS & Co., of 27, Chancery Lane, London, W.C., and 105, Colmore Row, Birmingham, Consulting Engineers, Chartered Patent Agents and Enrolled Patent Attorneys of the United States.

APPLICATION FILED IN GREAT BRITAIN.

Process for the Extraction of Ethereal Oils from the Blooms of Hops and other Plants.—Leopold Nathan, London. No. 519 of 1905.

APPLICATION PUBLISHED IN GREAT BRITAIN.

Reducing Oily Materials to a fine state of sub-division, and in applying same to road and other surfaces.—Henry Otto Brandt. No. 28213 of 1904.

This relates to a method of reducing oily material to a fine state of sub-division, and applying same to roadways or other surfaces, which consists in treating a small proportion of the material with water or aqueous solution in a rapidly rotating drum, or by means of a rapidly revolving disc, or by a steam or air jet or otherwise to cause the oily material to become finely suspended in the water or aqueous sslution, and applying the admixture of oily material and water so formed directly to the road or other place before the particles of oily material can coalesce.

Improvements in Apparatus for Separating Oil and the like from Water and other Impurities.—Herbert John Haddan, of the firm of Herbert Hadden and Co., London. (Emile Roth le Gentil, of Douai, Nori, Jean Tachard, of Paris, and Vincent Alba and Louis Alba, both of Paris, France). No. 29273 of 1904.

This relates to an apparatus for recovering oil contained in water derived from engines, and consists in the combination of a recuperator proper, which eliminates a large part of the water, with a separator adapted to receive tha mixture extaacted from the recuperator, and which extracts therefrom all the fatty substances, and collects the same in a separate receptacle.

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 25th January, 1906, as follows:—

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The Petroleum Industrial & Technical Review, Ltd.

SATURDAY, JANUARY 27TH, 1906.

TWO SIGNIFICANT EVENTS.

DURING the past few days two events have occurred in the oil trade of this country which have their own significance. The first is a reduction in the price of illuminating oil to the extent of about one halfpenny per gallon; and the other is an increase of double that amount in the price of motor spirit. Such a diametrically opposite movement in the quotations for petroleum products somewhat similar in their character, must have struck many as being not a little strange, but when all the surrounding facts are considered, it is only what might have been expected.

Whenever the petroleum market in England experiences a somewhat sudden change, the daily press furnishes most amusing, if not to say ludicrous, so-called explanations for the movement, and the present occasion has been no exception to the rule, for we have had a number of instances of what can be accomplished when the imagination of a fertile brain is called upon. Many of the writers in the daily press have immediately jumped at the conclusion that there is, on the one hand, a great abundance of illuminating oil, and thus the price has been lowered, while on the other the "giving out" of the "benzine fields" has necessitated a stiffening in the petrol quotations, one journal even going so far as to remark that this increase is only paving the way for many others which are to bring the price of petrol to a prohibitive figure.

This is the view furnished by our daily organs as to the causes which have led up to the decline in illuminating oil and the increase in the price of petrol. But let us look at a few facts, and see how justifiable have been the comments in the daily press. We will first take the case of illuminating oil, and here give a few figures of the prices on the London market for the past few weeks:—

	Russian.	American.	Water White.	Roumanian.
Jan. 1st ..	6¼d.	6⅞d.	8¼d.	6¼d.
,, 8th ..	6⅛d.	6¾d.	8⅛d.	6⅛d.
,, 15th ..	5¾d.	6⅜d.	7¾d.	5¾d.
,, 22nd ..	5¾d.	6⅜d.	7¾d.	5¾d.
,, 26th ..	5¾d.	6⅜d.	7¾d.	5¾d.

Thus, then, the decline in the price of illuminating oils has been one halfpenny per gallon, and the cause for this reduction is not far to seek. When the disturbances broke out in the Caucasus last August, and the petroleum trade of Russia with this country was seriously interrupted, the price of the Russian oil on the English market advanced from 4¾d., at which figure it stood in June, to 7⅝d. in November. Following the natural order of things, American oil also advanced, but not in the same ratio, for it rose from 5⅛d. to 7⅛d., though for a few weeks it even stood at a higher figure. For a time, however, the Russian product on this market was almost out of the question, and consequently American oil held full sway, the imports of illuminating oil from that country to England during some weeks reaching five or six million gallons per week. Since the termination of the war of prices between the leading distributing companies in this country, the quotations for illuminating oil have been fairly well maintained, especially since the Russian product has been difficult to obtain in very large quantities.

The past few weeks, however, have brought about a change in regard to Russian oil, for, with the resumption of work at the oil fields, several fairly large cargoes of illuminating oil have been shipped from Batoum, and it goes without saying that much of this is destined for England. Russian oil, therefore, again becomes a factor in our illuminating oil trade, and it is undoubtedly its re-appearance as a competitor which has directly been responsible for the lowering of quotations. The most recent information from Baku is anything but reassuring, and thus it is extremely likely that the decline recently recorded in illuminating oil prices will only be of short duration.

Turning to the advance which has taken place in the price of petrol, there is every reason to believe that its value upon the English markets will be permanantly enhanced. This, however, is not in anticipation of there being a shortage in the supply; on the contrary, we have over and over again proved that even with the most extended use of petrol, the supply for years to come can more than equal the demand. The price of the article has for a long time been artificially low, consequent upon severe competition, and it has been imperative that some slight advance would be necessary if petrol was to pay for its production, manufacture and transport.

Quite a number of matters closely bear upon its price, not the least of which is the great expense of storage and distribution in this country. The cost of transit, too, is an important item, and one cannot but think that unnecessarily drastic restrictions have been placed upon it, both from the point of transport and storage.

But however this may be, the fact still remains that the trade in petroleum spirit in this country is carried on by the various distributing companies at an enormous expense, and the increase of one penny per gallon to the consumer still keeps the price below what it was a few years ago. One certainly cannot blame the distributors for adopting a policy under which they will no longer work without an adequate return for capital expended.

LONDON OIL SHARE MARKET.

Friday, Jan. 26th.

The past week has been totally devoid of interest in the Oil Share Section of the London Stock Exchange. For the convenience of our readers we give last Saturday's quotatiions in full as follows:—

Anglo-Russians $\frac{1}{16}$-⅛, Assam Oil ⅝-⅞, Baku Ordinary 3s. 9d. to 4s. 3d., Preference 7s. 3d. to 7s. 9d., Bibi-Eybats ½-⅝, Debentures 88-93, European Petroleum Preference $\frac{3}{16}$-$\frac{5}{16}$, Debentures 87-91, Californian Oilfields 6½-6¾, Russian Petroleum Ordinary 13s. 6d. to 14s. 6d., Preference 14s. 6d. to 15s. 6d., Debentures 91-94, Schibaieff Ordinary 9s. 9d. to 10s. 3d., Preference 3⅜-3⅝, Spies Petroleum $\frac{13}{32}$-$\frac{15}{32}$, Shell Transport Ordinary 22s. 3d. to 22s. 9d., and Preference 9-9½.

From these values the only alterations were a loss of an ⅛ in Californian Oilfields at 6½-6¾ on Wednesday, and an improvement of ¼ at 9¼-9¾ in Shell Transport Preference on Thursday. To-day's prices are given in full on page 68.

The end-January settlement commenced on Tuesday, when the business to be adjusted in the miscellaneous market proved to be exceedingly light. The rate charged for carrying over Oil Shares was about six per cent. to eight per cent., and alterations disclosed by the making-up prices were somewhat irregular. Schibaieff Preference rose ⅛ at 3¾, Spies 1s. at 8s. 6d., and Russian Preference 3d. at 14s. 9d. On the other hand, Russian Ordinary fell 1s. at 14s., Californian Oilfields $\frac{1}{16}$ at 6¾, and Schibaieff Ordinary 3d at ½. Anglo-Russians at ⅛, Baku Ordinary at 4s., Preference at 7s., and Shell Transport Ordinary at 22s. 9d. were without alteration.

LATEST FROM THE GALICIAN OIL FIELDS.

From Boryslaw comes the news of a fresh strike of oil, in the southern part of the field, bordering on Mraznica, in the direction of Schodnica. The well in question, the "Wiara," belongs to Messrs. Kratell, Just and Sielecki, and is now about 950 metres deep. The production is about 15 tons daily. The strike is the more interesting from the fact that a number of other borings started in this locality all yielded negative results.

A considerable tract of land at Ratoczyna some time ago acquired from Messrs. Sroczynski and Bogusz by a German syndicate, is now to be developed by borings which, if successful, will greatly extend the Boryslaw oil-producing region.

The Klaudyusz well has somewhat abated its yield, but against this, well No. 8, of the Galicia Co., is yielding 80 tons daily, and the "Arthur" well, on the Goldhammer property, is also keeping up a good rate of production. It is rumoured that the last-named property has been sold to an English syndicate.

Reports from Tustanowice continue favourable. The two boreholes on the Litwa plot are yielding about 190 tons daily; the "Triumph" well, 120 tons; and the "Ernestine," about 80 tons daily. Last month the total production of the Litwa plot amounted to 4,670 tons; the "Triumph" well yielded 1,900 tons; the "Ernestine," 1,230 tons; the "Bitums," 830 tons; the "Georg," 1,290 tons; the well of the Urycz Co., 380 tons; the "Bertolds," 180 tons; the "Ewka," 120 tons; the "Genia," 120 tons; and the "Laura," 80 tons. For the purpose of comparison it may be mentioned that the great Klaudyusz well at Boryslaw has produced in December 6,250 tons, which already shews a falling off against the 8,600 tons produced in November and 8,620 tons in October.

An important oil field is now being developed at Rayskie, near Dukla. There are two boreholes owned by the Rayskie Co., the deepest of which, the "Waclaw," has now been producing for a year and a-half 15 tons of oil daily. The second well, the "Michal," has now reached a depth of 400 metres, and it is proposed to drill further in order to reach the deeper lying and more prolific strata. Messrs. Lenartowicz, Rokach, and Sussmann also own land in this locality. Mr. H. Perutz has acquired some land in the neighbouring locality of Olchowice. The Galician Storage Co. proposes to lay down a pipe line from Rayskie to Ustyanowa railway station, a distance of about 30 kilometres.

Considerable activity prevails in the Sanok oil district; lands change hands rapidly at continuously rising prices. It is proposed to develop two supposed oil zones, one in the south beginning from the Tarnawa-Dolna field, developed by the Schodnica, and another in the north, the development of which was commenced with inadequate means some time ago by Baron Rade. The first zone stretches along from Tarnawa-Dolna by Wielopole, where Messrs. Rokach and Sussman have obtained such excellent results over Zagorz to Poraz. The following new firms have established themselves on the borders of Tarnawa and Wielopole:—Dr. Nebenzahl and Co., the Sanok Co., and the Wielopole Co. At Zagorz, the Schodnica Co. is drilling with good results, and at Poraz, Messrs. Styler and Zeitleben are trying their luck. Dr. Breitenwald intends to start boring further west on an extension of this line. On the second oil zone running from Wielopole, over Sanok to Zahusyn, the Lemberg firm of Landesber and Wahl has started a borehole to the west of Zagorz, which is expected to prove the value of this zone.

THE BAKU OIL MARKET.

After a long period of inactivity, official quotations have now been resumed at the Baku Oil Exchange. A whole series of transactions concluded recently have been recorded at the Exchange. The prices quoted shew signs of the unsteadiness of the market, and the undefined state of the trade. The telegrams denote a firm tone in the market and a clear tendency to rise since the beginning of the new year. The latest quotations for crude oil, spot, 19 to 20 copecs, but forward crude is quoted higher. Residuals are now sold at 23 copecs. The ensuing period of quiet will undoubtedly infuse greater animation in the market, as the time is now arriving for the conclusion of contracts for deliveries with the approaching re-opening of navigation and the resumption of activity in the refining industry. On the markets of the interior of Russia there is no change either in kerosene or residuals.

PETROLEUM MOVEMENTS AT BATOUM.

The movement of petroleum oils at Batoum in October and November is given below:—

	Arrivals.	Shipments.	Stock on December 1st.
Kerosene	818,000	2,509,000	3,871,000
Solar Oil	10,000	—	459,000
Kerosene Distillate ..	—	—	43,000
Machine Oil	227,000	541,000	195,000
Spindle Oil	56,000	95,000	113,000
Cylinder Oil	1,000	21,000	23,000
Vaseline	—	77,000	6,000
Lubricating Distillate.	—	34,000	31,000
Residuals	120,000	117,000	237,000
Total..	1,232,000	3,414,000	4,979,000

Of the total stock of kerosene on the 1st December, 2,000,000 poods belonged to the refiners' combine, which has been sold and is now being exported. The remainder was to be shipped before the new year.

The larger part of the shipments in October and November went to British ports, which took 1,768,000 poods. There was one large cargo of 600,000 poods of bulk oil to the Far East. France took up 185,000 poods and 488,000 poods went to Germany. It is significant that Belgium and Holland, which usually take considerable quantities of Russian oil, took nothing in October and November. To Turkish and Balkan ports there were shipped 132,000 poods, and to Russian home ports, 165,000 poods.

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Residuals for Sugar Refineries.—The five sugar refineries in Roumania consume 20,000 tons of residuals per annum, and only about 1,100 tons of coal.

AMERICAN NOTES

A Refinery for Butler.—A large oil refinery is to be erected at Butler by the Valvaline Oil Co., which is now refining in New Jersey and Pennsylvania.

A Deep Test Well in Kern.—The Grace Oil Co. recently drilled a well to a depth of over 3,000 feet in the Kern River field in California, which has successfully been brought in.

Prospects in Mexico.—A New York company believes that a considerable fuel oil production may be developed at Eubero, Mexico, and is, therefore, endeavouring to promote the extension of a railway to that region.

Scarcity of Lumber.—The scarcity of lumber in many of the Kansas and Indian Territory districts is causing the Prairie Oil and Gas Co. much trouble, and great delay is being now experiencced in finishing many of the storage tanks in those oil regions.

Uinta County Oil Field.—The Uinta County oil field is making rapid headway, and much activity is now being displayed in the drilling of test wells so that if possible the producing line may be extended. We expect to be able to deal with the field at length in our next week's issue.

A New Company.—A new company has recently been incorporated under the title of the Territorial Oil and Gas Co, in the Mid-Continental fields. The concern has leases upon 25,000 acres of land located in Oklahoma, near Kingfisher, and will soon commence the development of the property.

In Arizona.—An official intimation issued by the President of the Yavapai Oil and Development Co., operating near Del Rio, states that the experts report very favourably upon the possibility of striking oil in the well now being drilled. The drill is down about 600 feet, and it is stated that a genuine oil sand has been struck.

The Dayton Field.—A writer in the current issue of the *Petroleum Gazette* states that the Dayton field has not yet come up to the general expectations. Of 41 wells that have been started during the past year, only 19 have been completed, of which 12 are producers. The production is now down to about 500 barrels per day.

Kansas Oil Runs.—There was a decided increase in the amount of oil run during the month of December, the average being 46,687 barrels daily, as compared with 45,167 barrels per day for November. The most noteworthy figures are those relating to the delivery of oil to the refineries and markets. November shewed 416,476 barrels of oil delivered, but December displayed 684,642 barrels for the month, thus shewing a gain of over 8,000 barrels daily.

A Year's Development.—From the figures of the operations in the South-western oil field of America during the past year, a wonderful development is shewn. In Indian Territory, Oklahoma, and Kansas there were completed a total of 4,685 wells, the Cherokee district leading with 1,931. Next comes Kansas with 1,488; Osage, 517; Cleveland, 300; and Creek, 219, while, in addition, a number of wells were drilled in territory of an undefined nature—in the Creek, Chicasaw, and Choctaw Nations.

The Panama Pipe Line.—Information concerning the pipe line project across the Isthmus of Panama continues to leak out. The Union Oil Co. undertakes to pay $500 per month to be applied to school purposes in the canal zone, and also to permit the Government to draw upon its pipe line at any point for oil at 90 cents per barrel. The company also undertakes to complete the line by next August, and to build suitable tank steamers in America for conveying the oil to the various markets of the world.

An Important Deal.—It is freely reported in the Californian press that the Santa Fe Railroad Co. has become the sole owner of the Midway oil field, through the purchase of the half interest held by others in the Chanslow-Canfield Midway Oil Co. The company had previously acquired a half interest by purchase at a cost of $800,000. The field contains a score of wells, and the recent bringing in of another productive well in a remote section of the field not previously prospected, and whose mineralisation was in doubt, has extended the productive area immensely.

MOTOR NEWS.

Numerous entries have been received for the Targa Florio race, which is to be held in May, at Sicily. Among the many well-known firms which have entered is the Fiat Co., who will run three cars driven by Lancia, Cagno, and Nazzaro.

—*—

The annual meeting of the Motor Cycling Club was held last week. Judging from the report and the balance sheet, it is pretty evident that the club is in a flourishing condition. The membership now totals 220, whereas in the year 1902 it was only 30.

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The Birmingham motor show, which has been open during the present week has attracted a deal of attention. Being held so soon after the Olympia show, however, few novelties are to be found within the walls of Bingley Hall, the cars mostly being counterparts of those seen in the London exhibition.

—*—

Among the principal features at the motor show at the Crystal Palace is to be the 100 h.p. Itala racing car.

—*—

Queen Margherita has just given a new proof of her delight for motoring. Every spring she undertakes a lengthy motoring tour; last year she visited Holland *via* Switzerland and Germany. For that trip she used a 24 h p. Fiat car, in all covering 3,015 miles. This spring she intends—at least, so it is said—visiting America, and she has placed an order with the Itala Co. for a 50 h.p. car. It will be, of course, luxuriously fitted up, and the body built to hold seven persons, with space for luggage. For town use she has ordered an 18 h.p. Itala car.

—*—

The new company formed to develop the sale of N.A.G. cars in this country is to be called the N.A.G. Automobile Company of Great Britain and Ireland (1906), Ltd., and will be moderately capitalised at £5,000.

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At the International Automobile Exhibition, to be held in Berlin next month, the Continental Caoutchouc and Gutta-Percha Co., Hanover, have arranged to hold a tyre-fitting competition, in which they will offer cash prizes to the value of £50 to those accomplishing the fastest times in fitting Continental motor tyres.

—*—

His Grace the Duke of Sutherland has just recently commissioned the Daimler Co. to build a 30-40 h.p. 10 feet wheelbase chassis to his order. The Earl of Aberdeen, the new Viceroy of Ireland, has, likewise, honoured the Daimler Co. with an order for a 28-36 h.p. 10 feet wheelbase chassis.

—*—

His Excellency Senor Don Agnelin Edwardo, Envoy Extraordinary and Minister Plenipotentiary of Chile in Italy, Spain, and Switzerland, has just acquired a 24-40 h.p. F.I.A.T. car for touring purposes.

—*—

On Thursday at the Florida East Coast Automobile Association's third annual series of speed trials on Ormond-Daytona beach, the five mile championship was won by Clifford Earp on a six cylinder Napier car in the record time of two minutes and fifty-six seconds.

—*—

As a moving force petrol appears to have taken the place of free beer. During the elections throughout the country, the electors in scores of cases refused to go to the poll unless a motor car was sent to fetch them.

—*—

Mr. Glidden, who is still upon his tour round the world with a motor car, has cabled that after driving from Bombay to Khyber Pass, he drove across Northern India, following the Grand Trunk Road from the Ganges to Calcutta, a total distance of 4,400 miles.

—*—

According to some Continental journals, the proposed routes of the Circuit European where they transverse the Austrian Alps between Italy and Austria present a great many difficulties. Some are barred to motor cars, while others are exceptionally steep, and are reported to be practically impracticable for voiturettes and small cars. The most favoured route is Milan, Brescia, Padua and the faubourg of Venice.

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Messrs. Thornycroft, Ltd. have had contracts from the War Office for the supply of motor tractors. Two have already been supplied—the larger of which is fitted with a four-cylinder engine and is 40 h.p.

OUR. . . . . AMERICAN LETTER . .

A Review of the Operations in the Pennsylvanian Oil Fields during 1905. . . . .

PITTSBURG, *January 10th*, 1906.

Although there has been considerable activity in Pennsylvanian fields during the past few months, it is a fact that when the details of operations become public property it will be seen that fewer wells were completed in the petroleum producing regions of New York Pennsylvania, West Virginia, and South-eastern Ohio in 1905 than in any year for the last decade. As readers of the REVIEW are well aware, the past year has been a remarkable one in the American fields in a number of ways, but 1905 will be remembered, so far as the Pennsylvania regions are concerned, principally because of the fact that the results of operations have proved quite inadequate to check the constantly declining yield of high-grade oil. The operations in the main were directed toward the discovery of new pools, but for the most part the results have been very discouraging, while where producing sands have been encountered, the production has been of a somewhat insignificant nature when compared with the increasing demand for high-grade oil on the one hand, and the declining yield of the wells on the other.

The year has in fact clearly shewn the absence of first-class territory and the great scarcity of gusher strikes, and it is now a settled conviction of operators in the fields that no amount of drilling can bring about an increase in the supply of Pennsylvanian high-grade oil.

During the past year slightly over 7,000 wells were drilled and completed in the regions producing the Pennsylvanian grade of oil, and of this number, over 2,000, or roughly 30 per cent., were classed as being of the non-productive variety. These figures do not compare very well with those of the preceding year, when nearly 9,000 wells were completed, of which number 27 per cent. were non-productive. Thus it will be seen that not only have fewer wells been drilled in 1905 than in 1904, but the percentage of non-productive ones has increased. It is well to remember, however, that the year 1904 was a record one so far as drilling activity was concerned, for during that twelve months more wells were completed than in any previous year in the history of oil developments.

At the close of last year, the regions producing high-grade oil contained 235 rigs and 480 drilling wells, both of which numbers are below the figures at the end of the year 1904.

With reference to the various fields in the Buckeye regions of North-western Ohio, 1,550 fewer wells were completed last year than in 1904, but what is more disappointing is that the average new production declined about 50 per cent. In the Indiana oil districts, 2,000 wells were drilled in 1905, of which number about 12½ per cent. were of the duster class, and the new production dropped from an average of 6,000 in 1904 to 2,800 in 1905. The greatest decline was in the deep sand territory, in Delaware county, where wells of the gusher class are no longer encountered in drilling.

In analysing the figures of drilling operations in the various territories, we find that in the Pennsylvanian field, the average monthly completions numbered 593, as compared with 738, the monthly average of the preceding year; and of the former number, 192 were on the monthly average dry during the last year, as compared with 199 per month in 1904.

The new production from the completions is estimated at 3,884 barrels per month, as against 6,000 barrels, the monthly average for new production in 1904. In the Buckeye field, the average monthly completions of wells equalled 131, as against double that number per month for 1904, while the new production stood at exactly the same level per well. The Indiana field also shews a great drop in drilling activity, the average having been the completion of 5 wells per day for the year, as against 10 per day for the whole of 1904. The new production, however, for last year was considerably less than the half of 1904, but this to some extent is accounted for by the great increase in dry holes.

With regard to Kentucky and Tennessee, the decline in drilling has only been slight, for during the year 326 wells were completed, as against 353 wells for the whole of 1904. In spite of this slight decline, however, the productions shews an increase, while the number of dry holes encountered has been less than was the case in the preceding twelve months.

In all, over 10,000 wells were completed in the oil-producing districts of New York, Pennsylvania, Indiana, West Virginia, Ohio, Kentucky, and Tennessee, in 1905, and of that number nearly 25 per cent. were dry holes or gassers.

The conditions of the market have possibly had some effect in preventing operators drilling extensively in new territory, for the average prices for the year have been the lowest since 1902. The average has been $1·39 per barrel, as against $1·62 for 1904, and $1·59 for 1903; although if we go back so far as seven years ago we find that the Pennsylvanian oil was only commanding about 93 cents per barrel.

At the end of the past year the conditions of the market were very favourable, and it is confidently expected that with the advent of fine weather, drilling operations will be re-started with great energy, and the present year will see extraordinary activity in Pennsylvanian oil field operations.

AMERICAN PATENTS GRANTED.

Apparatus for Extracting Turpentine from Wood.—Joshua G. Gardner, Jacksonville, Fla.

An apparatus involving a vertically disposed vessel having a drop-down door provided with a perforated plate, the door and plate being separated to provide a steam chamber, the door having an outlet for vapours and the plate serving to sustain a mass of sawdust or ground wood in the retort, means for directing steam in a downward direction through the retort, and means in the vessel for positively opening up paths for the steam.

Device for Filtering Liquids.—George Stade, Berlin, Germany.

The combination with an inner perforated vertical pipe of relatively small diameter and a surrounding outer perforated tubular casing of relatively large diameter, of liquid admission and discharge pipes connecting respectively with the inner perforated pipe and with the outer tubular casing, a column of intermediate superimposed, spaced, flat tubular members of equal diameter and with partly conical and partly straight side walls and outwardly extending, open ring-shaped rim, current-impinging and impact-breaking bodies, arranged between the inner pipe and said intermediate column of tubular members, and filtering material between said column and said surrounding outer tubular casing.

Crude Oil Engine.—David W. Lyon, Suttercreek, Cal.

The combination with a cylinder, of a reciprocating piston mounted therein, a fuel valve arranged in one end of said cylinder, said valve having a flaring end to serve as a deflector for the fuel, a valve seat for said valve provided with a series of radially arranged jets or apertures for injecting the fuel in a spray into the cylinder, when the valve is opened, and means whereby said engine may be changed from an engine to an air compressor, or to a steam compressed air engine.

Well Drilling Apparatus.—Leonard D. Shryock, Marietta, Ohio.

The combination of a frame, a main crank-shaft journaled therein, a cable spool loosely mounted on the crank-shaft, a drilling cable reel journaled in the frame in front of the crank-shaft, a baling line spool journaled in the frame at the rear of said crank-shaft, gearing connecting the crank-shaft and the drilling cable reel, clutch mechanism for rendering the gearing either operative or inoperative, and clutch mechanism for engaging and disengaging the main crank shaft with the cable spool mounted thereon.

Process of Extacting Oil, Grease and the Like from Oil-bearing Material.—Frederick J. Maywald, New York, N.Y.

The process of separating and extracting oil, grease and the like from water or similar liquid, and from material floating in, or in suspension in, water or similar liquid, which consists in adding carbon tetrachloride to the mass, and permitting the same to descend therethrough and separate therefrom by difference in specific gravity, drawing off the carbon tetrachloride, and then separating the same from the oil, grease and the like in solution therein by distillation.

Process for Treating Petroleum Oils.—James P. Wintz, Sour Lake, Texas.

The process consists in separating asphaltum from crude petroleum oil by means of gasolene and sulphuric acid, treating and separating asphaltum with gasolene, water and caustic soda, and then passing the asphaltum so treated through an evaporator.

Apparatus for Cooling and Drying Oil Cake.—Alfred W. French, Piqua, Ohio.

The combination of a receptacle into which the material is fed, means for changing the physical condition of the material in the receptacle, and means for maintaining a substantially constant weight of material in the receptacle, comprising a weighted lever supporting the receptacle, a rotary discharge device mounted on the receptacle, a shaft connected to said discharge device, a loose drive belt for said shaft, and a belt tightener connected to said weighted lever for tightening said drive belt.

Rig for Oil Wells.—Frank W. Pennell, Lima, Ohio.

The combination of a rig or derrick frame, a drum disposed in one extremity of the frame and having a reduced extremity provided with means for manually operating the drum, and also with winding surfaces of different diameters, an actuating cable engaging one end of the drum and operative by power other than manual, an elevating and lowering cable engaging the winding surfaces of the drum having different diameters and movable over the end of the frame opposite that in which the drum is located, and a kinker device having the elevating and lowering table passed therethrough and located above the drum for imparting to said able an elevating movement without operating the drum, the kinker device being automatically adjustable over the drum to compensate for the position of the cable with respect to the latter.

KANSAS PIPE LINE RUNS AND SHIPMENTS.

In the petroleum regions of Kansas and Indian Territory, the pipe line runs for December averaged 48,688 barrels a day, and were the heaviest on record. The shipments for the same month were likewise larger than during any preceding month in the history of the developments. Stocks again recorded a heavy gain, but not to such an extent as during the preceding months of the year. Over 26,000 barrels a day were accumulated in iron tanks, as compared with 31,000 barrels a day in November. The total stocks at the close of the year, as already announced in the Review, exceeded 13,000,000 barrels, which represented a gain of 8,000,000 barrels, or over 150 per cent. during the year.

The following table gives the receipts and deliveries of the pipe line department of the Prairie Oil and Gas Co. from the Kansas, Indian and Oklahoma Territory oil fields during December:—

	Total Barrels.	Daily Average.
Runs	1,509,325	48,687
Deliveries	684,642	22,085
Put into tankage	824,683	26,602

The December runs averaged 48,687 barrels a day, which was an increase of 3,521 barrels over the average for November. The shipments or deliveries averaged 22,085 barrels, or 8,202 barrels more than during the previous month.

In the following table is given the monthly and daily pipe line runs from the fields for 1905 and 1904:—

	1905.		1904.	
	Total.	Daily Average.	Total.	Daily Average.
January ..	793,648	25,601	282,309	9,107
February ..	564,432	20,158	313,566	10,813
March.. ..	695,008	22,449	338,274	10,912
April	549,339	18,311	348,791	11,627
May	784,229	25,298	383,515	12,371
June	715,397	23,847	355,740	11,858
July	1,091,000	35,193	508,996	16,419
August ..	1,212,912	39,126	548,276	17,686
September ..	1,203.362	40,112	531,611	17,720
October ..	1,380,208	44,523	600,737	19,379
November ..	1,355,012	45,167	640,076	21,336
December ..	1,509,325	48,688	751,146	24,231
Total ..	11,854,772	32,479	5,603,037	15,309

From the above table it will be seen that the pipe line runs from the mid-continent oil fields increased from 5,603,037 barrels in 1904 to 11,854,772 barrels in 1905. This was a gain of 6,251,735 barrels, or nearly 112 per cent.

The shipments from the mid-continent oil fields for the year 1905 were as follows:—

1905.	Total.	Daily Average.
January	315,426	10,175
February	292,649	10,451
March	249,564	8,050
April	241,252	8,042
May	219,065	7,067
June	185,883	6,196
July	206,155	6,650
August	279,391	9,013
September	318,864	10,629
October	209,094	6,750
November	416,476	13,883
December	684,642	22,085
Total	3,618,467	9,914

The American Oil Market.

New York, Week ended Jan. 13th.

The reports from the Northern petroleum producing fields during the past week have been rather meagre, but they indicate somewhat more activity in the location of wells and starting of development work. To what this increased search may be attributed is not clear, as the results of late have been of a discouraging nature, and no gushers have been reported which would stimulate field work in their vicinity. It is probably due to the comparatively mild weather, although in some sections the roads are reported in execrable condition, causing largely increased cost in the hauling of supplies; in fact, in some sections development work has been deferred until next spring on that account. Fewer completions were reported during the past week, says the *Oil, Paint and Drug Reporter*, and although a few good wells have rewarded the efforts of the drillers, the great majority of those shewing oil are small pumpers, while the percentage of dry holes shews no improvement, about one in four of the wells completed having proved devoid of oil. Several good gas wells have been reported, and these will go toward off-setting the losses by failures to find oil. In the Kansas and Territories fields there appears no cessation in development work, operators in these fields being greatly encouraged by the increasing consumption of mid-Continent oil, though stocks continue to accumulate at an uncomfortable rate, and the storage problem is still one to be reckoned with. From Texas the reports shew that the production is steadily decreasing, and as the deliveries have been larger, the prices are hardening. Latest quotations are:—Batson, 32 @ 35c., as to gravity; Humble, 34 @ 38c.; Saratoga, 34 @ 35c.; Sour Lake, 32 @ 44c., as to gravity; Spindle Top, 45c.

Refined and Products.—The demand for refined for export has been rather tame during the past week, few tank vessels having been on this side, but it expected a more active movement will follow. The conditions in Russia are believed to be steadily improving, but no further reliable news has been received from the centre of the petroleum industry. There is little probability of an early resumption of shipments of refined, although English reports are to the effect that progress is being made in re-building the burned plants. The engagements for export during the past week amounted to less than 100,000 barrels, all for shipment in bulk.

The price for barreled oil has remained steady at 7·60 for New York loading, and at 7·55c. for Philadelphia loading. The principal foreign markets are easier. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. od. @ 3s. od. to Continental ports, as to port and vessel.

Cases for export have been in active request, and sales of over 450,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in good request, and sales of about 60,000 barrels are reported. Pennsylvania crude is quoted at 7·60c. in barrels.

Crude naphtha continues steady. For export, sales of about 5,000 barrels have been reported.

CLOSING QUOTATIONS.

Crude.

		Week ended Jan. 6. 1906.	Jan. 13. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4·70	4·70
Residuum, bbls for export	.. ..	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were:—

	Week ended Jan. 13. 1905.	Jan. 13. 1906.
Tiona	1·57	1·68
Pennsylvania	1·42	1·58
North Lima	0·95	0·94
South Lima	0·90	0·89
Indiana	0·90	0·89
Canadian Oil:		
Petrolia	1·48	1.34

Refined—For Export.

		Week ended Jan. 6.	Jan 13.
Cargo Lots for export	per gal.	7·60	7·60
In bulk		4·70	4·70
Philadelphia loading		7·55	7·55

Refined in Cases—110 Fire Test.

	Week ending Jan. 6.	Jan. 13.
5,000 to 10,000	10·35	10 35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended Jan. 6.	Jan. 13.
120 fire test, S.W.	per gal...	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ending Jan. 6.	Jan. 13.
Naphtha, crude, car. lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	17	17

Pennsylvania Oil Runs from Jan. 5th to Jan. 10th were:—Jan. 5th, 68,893; Jan. 6th and 7th, 107,774; Jan. 8th, 34,472; Jan. 9th, 57,911; Jan. 10th, 63,421. For the month of Nov., 2,169,468.

The Deliveries of Pennsylvania Oil for the same dates were:—73,501; 83,076; 68,057; 79,911; 82,356; For the month of Nov., 2,616,001.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended Jan. 12 and from Jan. 1, were as follows:—

	Week.	Year.	1905.
Refined, barrels and bulk	60,000	198,500	294,800
Refined, cases	473,000	1,014,000	220,000
Crude, barrels and bulk	59,200	59,200	51,500
Crude, cases	—	—	—
Naphtha, barrels	—	—	42,000
Residuum, barrels	—	—	—
Lubricating, barrels	—	—	100
Total, barrels cde. eq.	315,802	707,389	638,770

Clearances for the Week.

During the week ended Jan. 12th, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1905.
Refined	4,759,953	13,874,300	17,118,856
Crude	—	—	113,453
Naphtha	36,910	97,450	197,038
Residuum	—	—	5,064

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Jan. 12th	6,349,933
Total from New York, from Jan. 1, 1906	18,502,400
Same period last year	22,938,594
Decrease	4,436,194
From United States, week ended Jan. 12th	11,227,594
Total from United States, since Jan. 1, 1906	27,810,331
Same period last year	32,133,386
Decrease	4,323,055

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The "Review" Shipping List.

Jan. 25, 1906.

Specially Prepared for this Journal.

Note.—Except when otherwise stated the Vessels are Steamers.

(*The following abbreviations are used in this table:*—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Sables d'Olonne	Philadelphia	L. Jan. 22
ALCHYMIST	Amsterdam	Barrow	L. Jan. 22
AMERICAN	New York	Antwerp	Arr. Jan. 21
APPALACHEE	Shanghai	SanFrancisco	Arr. Dec. 15
APSCHERON	Antwerp and Rouen	Batoum	P. Dardanelles, Jan. 12
ARAL	Tyne	Philadelphia	L. Jan. 17
ARAS	Newport	Batoum	P. Oitavos, Jan. 13
ARGYLL	Astoria	Port Harford	Arr. Jan. 7
ASTRAKHAN	Rotterdam	Tyne	Arr. Jan. 19
AUGUST KORFF	Hamburg	New York	P Butt of Lewis, Jan. 22
AUREOLE	Barry	New York	Arr. Jan. 24
BAKU STANDARD	Batoum	Alexandria	L. Const'iple, Jan. 14
BALAKANI	Manchester	Port Arthur (Texas)	Arr. Jan. 21
BATOUM	Philadelphia	London	L. Jan. 12
BAYONNE	Venice	Messina	L. Jan. 18
BEACON LIGHT	Philadelphia	Lisbon	Arr. Del. Break., Jan. 17
BEME	Bombay	Rangoon	L. Jan. 6
BLOOMFIELD	Tyne	Rouen	L. Jan. 24
BORJOM	Batoum	Odessa	L. Sept. 18
BRILLIANT	Stettin	New York	L. Tyne, Jan. 17
BROADMAYNE	Tyne	Philadel phia	Arr. Jan. 10
BULLMOUTH	Yokohama	—	L. Jan. 10
BULYSSES	Kustendje	Amsterdam	Arr. Jan. 20
BURGERMEISTER PETERSEN	London	Philadelphia	P. Dungeness, Jan. 17
CADAGUA	—	—	In port, Bilbao, Dec. 26
CALCUTTA (Br. bq.)	Newcastle (N.S.W).	SanFrancisco	L. Dec. 4
CARDIUM	BalekPappan	Singapore	Arr. Jan. 14
CAUCASIAN	London	Philadelphia	P. Lizard, Jan. 14
CHARLOIS	Antwerp	New York	P. Lizard, Jan. 13
CHESAPEAKE	Manchester	New York	Put back Liverpool, Jan. 2
CHESTER	Antwerp	Philadelphia	Arr. Jan. 18
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Singapore	Yokohama	Arr. Jan. 18
COL. E. L. DRAKE	New York	Galveston	L. Oct. 25
COWRIE	Dunkirk	Cardiff	Arr. Jan. 11
CYMBELINE	Port Talbot	Philadelphia	Arr. Jan. 24
CZAR NICOLAI II.	Batoum	Antwerp	P. Peniche, Jan. 20
DAGHESTAN	Philadelphia	Dunkirk	L. Jan. 13
DAKOTAH	SanFrancisco	Shanghai & Canton	L. Nov. 24
DELAWARE	Cardiff	New York	L. Barry, Jan. 10
DEUTSCHLAND	Hamburg	New York	P. Nantucket, Jan. 24
DIAMANT	Philadelphia	Savona	P. Del. Break., Jan. 8
ELAX	Port Soesoe	Calcutta	Arr. Jan. 19
ELISE MARIE	London	New York	L. Jan. 14
ENERGIE	Philadelphia	Copenhagen	L. Jan. 14
ERIVAN	Swansea	Port Arthur (Texas)	L. Jan. 13
EUPLECTELA	Philadelphia	—	L. Jan. 16
EXCELSIOR	Burntisland	Ystad	Arr. Jan. 17
EZIO	—		Coasting Peru
FRANCE MARIE	Marcus Hook	Barcelona	Arr. Dec. 6
GEESTEMUNDE	Halifax	Philadelphia	Arr. Jan. 22
GENESSE	Liverpool	Philadelphia	Arr. Jan. 21
GEORGIAN PRINCE	Rouen	Tyne	Arr. Dec. 6
GOLDMOUTH	Soesoe	—	L. Dec. 21
GRAF STROGANOF	Cronstadt	Odessa	In Tyne, Jan. 10
GUT HEIL	Pillau	Havana	Arr. Jan. 19
HAINAUT (Dch shp.)	Beyrout	Smyrna and Antwerp	L. Jan. 22
HARRY WADSWORTH	Middlesbro'	Port Arthur (Texas)	P. Dungeness, Dec. 21
HELIOS	Fiume	Odessa	L. Jan. 6
HOTHAM NEWTON	Amsterdam	Middlesboro'	Arr. Jan. 25
HOUSATONIC	Bombay	Newcastle (N.S.W.)	Arr. Jan. 16
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Barcelona	Taganrog	At Piræus, Jan. 8
J. B. AUG. KESSLER	Sumatra	New York	Arr. Dec. 31
JAMES BRAND	Tyne	Port Arthur (Texas)	L. Jan. 16
KURA	Trieste	Belfast	L. Jan. 18
LA CAMPINE	Antwerp	New York	P. Lizard, Jan. 19
LA FLANDRE	Philadelphia	Ghent	P. Reedy Island, Jan. 12
LA HESBAYE	Antwerp	Philadelphia	At New York, Jan. 7
LA MADALEINE	Cardiff	Marseilles	Arr. Jan. 16
LA VIGUESA	Marcus Hook	Vigo	Arr. Nov. 6
LACKAWANNA	Tyne	New York	Arr. Jan. 7
LE COQ	Philadelphia	Cette	Arr. Jan. 23
LOUTSCH	Barcelona	Novorossisk	L. Const'n'ple, Sept. 5
LUCERNA	Manchester	Philadelphia	L. Liverpool, Jan. 21
LUCIFER	Rouen	Newport	Arr. Dec. 1
LUCIGEN	Port Talbot	Philadelphia	L Jan. 10
LUCILINE	Cette	Philadelphia	P. Gibraltar, Jan. 22
LUMEN	Bergen	Tyne	Arr. Jan. 12
LUX	Blaye	Philadelphia	Arr. Jan. 11
MAKKAVEI	Batoum	Odessa	L. Nov. 13
MANHATTAN	New Orleans	Bremen	L. Jan. 23
MANNHEIM	Tyne	New York	P. Dunnet Head Jan. 19
MARGARETHA	Batoum	London	Arr. Jan. 21
MEXICAN PRINCE	Tyne	Cuba	P. Dungeness, Jan. 14
MIRA	Manchester	Philadelphia	Arr. Jan. 22
MUREX	Bombay	—	L. Jan. 17
NARRAGANSETT	London	New York	Arr. Jan. 24
NERITE	Singapore	BalekPappan	Arr. Jan. 17
NEW YORK	Southampton	New York	L. Jan. 20
OCEAN	Amsterdam	New York	P. Dungeness, 12
ORANJE PRINCE	Vallo	Tyne	Arr. Dec. 31
ORIFLAMME	Marseilles	Philadelphia	Arr. Jan. 24
OSCEOLA	Tyne	New York	L. Jan. 23
OTTAWA	Marcus Hook	Tampico	P. Del. Break., Jan. 5
OURAL	Tyne	Philadelphia	P. Beachy Head, Dec. 25
PALEMBANG	Pulo Samboe	Singapore	Arr. Dec. 18
PAULA	Danzig	New York	Arr. Jan. 24
PECTAN	New Orleans	—	L. Jan. 19
PENNOIL	Philadelphia	Rotterdam	Arr. Jan. 20
PERLAK	Samboe	Singapore	Arr. Dec. 27
PETROLEUM	—	Gibraltar	Arr. Dec. 18
PHOEBUS	Hamburg	New York	P. Scilly, Jan. 13
PINNA	Manchester	Philadelphia	Arr. Jan. 24
POTOMAC	Liverpool	Philadelphia	P. Old Head of Kinsale, Jan. 13
PROMETHEUS	Clyde	Brisbane	Arr. Jan. 1
PRUDENTIA	Rouen	Port Talbot	Arr. Jan. 21
RION	Novorossisk	Hull	P. Dardanelles, Jan. 15
ROCK LIGHT	Rotterdam	Port Arthur (Texas)	Arr. Jan. 24
ROSSIJA	Novorossisk	Hamburg	L. Consti'ple, Jan. 19
ROTTERDAM	Rotterdam	New York	
RUSSIAN PRINCE	Liverpool	Havana	Arr. Jan. 24
SALAHADJI	Newchang	Singapore	Arr. Jan. 18

Vessel.	From.	For.	Latest Date and Position.
SEMINOLE	Philadelphia	Calcutta	P. Perim, Jan. 22
SILVERLIP	Antwerp	Hamburg	L. Jan. 24
SINGU	Bombay	Rangoon	L. Dec. 31
SNOWFLAKE	Penarth	Philadelphia	P. Barry Island, Jan. 20
SOPHIE	Messina	Batoum	L. Const'ple, Jan. 18
SPONDILUS	Singapore	Blexen	Arr. Jan. 23
STANDARD	Hamburg	Philadelphia	L. Tyne, Jan. 12
STROMBUS	Singapore	—	L. Jan. 14
SURAM	Batoum	Hull	L. Const'ple, Jan. 19
SUWANEE	Philadelphia	Barrow and Belfast	L. Jan. 11
SVIET	Alexandria	Odessa	Arr. Dec. 17
TELENA	Cardiff	Singapore	L. Suez, Jan. 7
TEREK	Batoum	Manchester	At Malta, Jan. 17
TIFLIS	Hamburg	Tyne	Arr. Jan. 19
TIOGA	Batoum	Liverpool	Arr. Nov. 25
TONAWANDA	Manchester	New York	L. Liverpool, Jan. 5
TROCAS	Singapore	—	L. Jan. 18
TURBO	London	Port Arthur (Texas)	Off I. of W., Jan. 3
TUSCARORA	Calcutta	Boston	P. Gibraltar, Jan. 12
TWINGONE	Rangoon	Madras	Arr. Jan. 4
VEDRA	Venice	Algiers	L. Jan. 18
VILLE DE DOUAI	Kustendje	Calais	Arr. Jan. 9
VILLE DE DIEPPE	Dieppe	Philadelphia	Arr. Jan. 9
VOLUTE	BalekPappan	—	L. Jan. 18
WEEHAWKEN	London	Sumatra	P. Perim, Jan. 22
WILLKOMMEN	Bremen	New York	L. Tyne, Jan. 24
WINNEBAGO (Late KINSMAN)	SanFrancisco	Shanghai	Arr. about Jan. 3

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

January 26th, 1906.

There are no changes to report in petroleum since the last decline, prices remaining as follows: —

Russian, 5¾d.; American, 6⅜d.; Water White, 7¾d., Roumanian, 5¾d.

LUBRICATING OILS

are unchanged, the following being the latest quotations:

American pale, £7 5s. to £8 15s.

American dark cylinder, from £7 10s.

American filtered cylinder, from £10 12s. 6d.

Shellene, £5.

TURPENTINE.

American turpentine is quoted for spot and to the end of May at 48s., slightly lower quotations for more forward deliveries.

LIVERPOOL OIL MARKET

January 25th.

Refined oils are very quiet, but sellers now quote 6¾d. for Russian and 7½d. to 8¾d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, January 25th.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, January 25th.

Standard White is quoted at 7·55.

RUSSIA.

Baku, January 23rd.

Price of crude oil in Black City is 20½ copecs per pood.

BELGIUM.

Antwerp, January 19th.

The petroleum market is very firm. Price of Standard White, 19¾ francs; January-March, 20 francs.

GERMANY.

Hamburg, January 20th.

The petroleum market is quiet Price of American Standard White remains at 7·30 marks per 50 kilos.

ROUMANIA.

January 23rd.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	3·35-3·40
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery	3·00- —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octroi tax of 12 fcs. per 100 kilos

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
„ sp. gr. 0·720-0·725	8·00- 9·00
„ sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

Bombay, January 6th.

There has been no further decline in prices of Burma oils since our last report.

American, "Snowflake," 150 deg.	Rs. 6	0	2
„ Chester, 125 deg.	4	8	2
„ Monkey Brand, 125 deg.	4	2	2
Russian, "Anchor," 125 deg.	4	14	6
„ "White Camelia" brand, 125 deg.	4	0	2
„ "Rising Sun," bulk, in local made tins	3	14	0
„ "Elephant" brand, in local made tins	3	10	0
„ Bulk, in Bombay Bazaar, 125 deg. per 10 gallons	3	3	0
Borneo oil in bulk	2	14	6
Burma Oil, in bulk, per 8 imperial gallons	2	11	0

TUBES FOR SALE.

FOR SALE, about 80 Tons of New 6-inch outside diameter Steel Tubes, ⅜-inch thick for 1,400 lbs. per square inch pressure, 16½-feet lengths, and flush joints, suitable for Oil Well Borings, etc.

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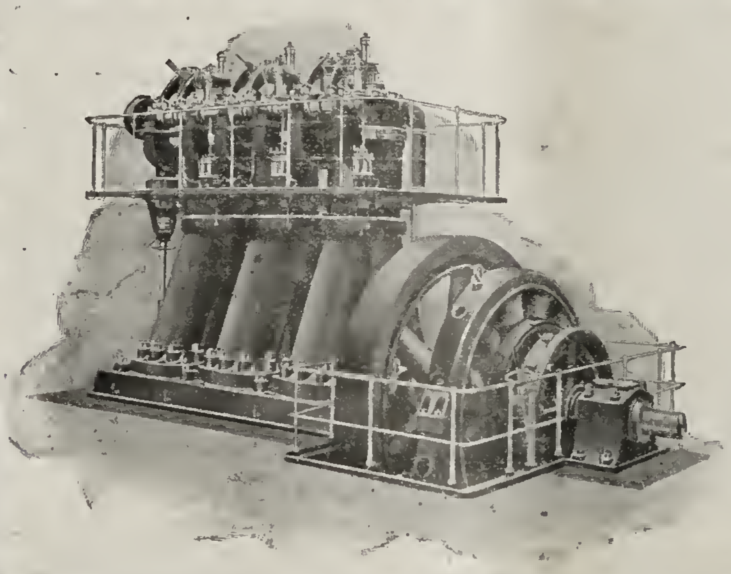
IMPORTS of PETROLEUM into UNITED KINGDOM

FOR THE WEEK ENDED JANUARY 23rd, 1906.

Specially prepared for this Journal by . . . the Custom House.

DATE.	PORT INTO WHICH IMPORTED.	CONSIGNEE.	VESSEL.	PACKAGES.	DESCRIPTION OF OIL.	NUMBER OF GALLONS.	PORT WHENCE.
Jan. 17	London	Mordaunt Bros.	Congo	104 brls.	M.Lub.	4,000	Fiume
,, 17	,,	,,	,,	299 brls	,,	11,950	Trieste
,, 17	,,	Produce Brokers	,,	100 brls.	,,	4,000	,,
,, 17	,,	Anglo-American Oil Co.	Minneapolis	125 bls.	Min. Colz.	5,000	New York
,, 17	,,	,,	,,	1966 brls.	Lub.	66,760	,,
,, 17	,,	Humphrey and Co.	,,	5 brls.	,,	200	,,
,, 17	,,	Fielder, Hickman and Co.	,,	2056 pipes	,,	69,300	,,
,, 18	,,	Anglo-American Oil Co	Crown Point	350 brls.	,,	14,000	Philadelphia
,, 18	,,	,,	,,	715 brls.	Min. Colz.	28,600	,,
,, 18	,,	Hemphill and Sons	Congo	250 brls.	Lub.	10,000	Trieste
,, 19	,,	H. Finkler and Co.	,,	52 brls.	,,	2,100	Fiume
,, 19	,,	T. H. Lee	Iris	8 brls.	,,	380	Hamburg
,, 19	,,	Joseph Barber and Co.	Cressida	167 pks.	Lub, Gr.	2,000	,,
,, 19	,,	R. Park and Co.	Syria	30 drums	Lub.	300	Boulogne
,, 19	,,	Homelight Oil Co.	Margaretha	Bulk	Lamp	745,280	Batoum
,, 20	,,	Scott's Wharf	Minnehaha	75 brls.	Lub.	3,000	New York
,, 22	,,	Felton and Crepin	City of Charleroy	10 brls.	Pet. Spirit	410	Brussels
,, 23	,,	D. C. Thomas	,, ,,	10 brls.	,,	410	,,
,, 23	,,	G. W. Sheldon and Co.	Ptarmigan	4 brls.	Lub.	200	Antwerp
,, 23	,,	T. H. Lee	Balgownie	31 pks.	,,	250	Hamburg
,, 23	,,	,,	Iris	25 brls.	,,	1,020	,,
,, 23	,,	A. Brown and Co.	Albatross	100 brls.	,,	4,000	,,
,, 23	,,	,,	Minnesota	160 brls.	,,	6,400	Philadelphi
,, 23	,,	Fielder, Hickman and Co	Minnehaha	61 brls.	,,	2,440	New York
,, 23	,,	Humphrey and Co.	,,	125 brls.	,,	5,020	,,
,, 17	Liverpool	Shaw and Hamilton	Merion	60 brls.	,,	2,400	Philadelphia
,, 17	,,	Meade-King, Robinson and Co.	Veria	275 brls.	Resid.	11,000	Trieste
,, 18	,,	Jas. Light & Son	Nyroca	20 brls	M.Lub.	800	Antwerp
,, 19	,,	Livrepool Storage Co.	Rutland	5 brls.	Lub. Comp.	200	Hamburg
,, 19	,,	Meade-King, Robinson and Co.	Quernmore	120 brls.	M. Lub.	4,800	Baltimore
,, 19	,,	W. Hughes	,,	100 brls.	Lub. Gr.	4,000	,,
,, 20	,,	E. H. Kellogg and Co.	Armenian	50 brls.	Lub.	2,000	New York
,, 20	,,	Pickfords, Ltd.	Cyclone	15 cases	Lub. Paste	500	Hamburg
,, 22	,,	W. H. Nott	,,	15 casks	,,	210	,,
,, 22	,,	Liverpool Storage Co.	,,	3 brls.	Lub. Comp.	120	,,
,, 22	,,	W. H. Jennings	,,	50 brls.	M. Lub.	2,000	,,
,, 22	,,	,,	Rhineland	50 brls.	,,	2,000	,,
,, 22	,,	Bramwell, Fern and Co.	,,	127 brls.	,,	5,230	,,
,, 22	,,	Vacuum Oil Co.	Armenian	713 pks.	Lub.	24,920	New York
,, 23	,,	Huxley and Co.	Rhineland	6 brls.	,,	230	Hamburg
,, 18	Bristol	H. R. James and Son	Chicago City	435 bris.	,,	17,400	New York
,, 18	,,	Ford and Canning	Montcalm	520 brls	Resid	10,000	Montreal
,, 22	,,	Pickford's Ltd.	City of Cologne	100 pks.	Lub. Paste	1,000	Hamburg
,, 20	Hull	W. Gillyott and Co.	Toronto	820 brls.	Lub.	32,800	New York
,, 20	,,	T. Wilson, Sons and Co.	,,	3 drums	Pet. Spirit	180	,,



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HIGHEST ECONOMY. EXTREME REGULARITY
EXTREME SAFETY. SELF STARTING.
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PACKED IN SEALED TWO GALLON CANS.

Universally used by all leading Motor Manufacturers, Motorists, Railway and Motor Bus Companies.

IN USE AND FOR SALE EVERYWHERE.

QUALITY TELLS.

To Dealers only.

DATE.	PORT INTO WHICH IMPORTED.	CONSIGNEE.	VESSEL.	PACKAGES.	DESCRIPTION OF OIL.	NUMBER OF GALLONS.	PORT WHENCE.
Jan. 20	Hull ..	T. Wilson, Sons, and Co.	Leo	6 brls.	Lub. ..	240	Antwerp
,, 20	,, ..	,, ...	Jago	251 brls.	,, ..	10,040	Trieste
,, 22	,, ..	,, ...	Juno	50 brls.	,, ..	2,000	Hamburg
,, 18	Manchester ..	Bramwell, Fern and Co.	Lestris	50 brls.	,, ..	2,140	Antwerp
,, 18	,, ..	Thompson, McKay and Co. ..	Terence	6 brls.	,, ..	240	New York
,, 19	,, ..	Donald Currie and Co.	Westmoreland ..	60 brls.	,, ..	1,800	Hamburg
,, 22	,, ..	Meade-King, Robinson and Co. ..	,, ..	208 brls.	,, ..	8,320	,,
,, 18	Middlesbrough	Harris and Co.	Consul Poppa ..	12 brls.	,, ..	480	Antwerp
,, 23	,, ..	J. J. Sutherland	,, ..	50 brls.	,, ..	2,000	,,
,, 18	Newcastle ..	C. Hassell and Son	Benedict ..	1027 brls.	,, ..	41,080	New York
,, 20	,, ..	Tyne-Tees Steam Shipping Co. ..	Juno	34 brls.	,, ..	1,360	Antwerp
,, 18	Dundee ..	D. Alexander and Sons	Cumberland ..	10 brls.	,, ..	400	Hamburg
,, 18	,, ..	,, ...	,, ..	6 brls.	Lamp ..	240	,,
,, 17	Grangemouth	J. Currie and Co	Staffa	385 brls.	Lub. ..	15,400	,,
,, 17	,, ..	W. G. Yooll and Co.	,, ...	200 br s	Lamp ..	8,000	,,
,, 22	,, ..	,, ...	Scalpa	150 brls.	,, ..	6,000	,,
,, 17	Leith	,, ...	Breslau	50 brls.	,, ..	2,180	,,
,, 18	,, ..	J. Currie and Co.	Coblenz	50 brls.	,, ..	2,180	,,
					NET TOTAL	1,212,910	

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO JANUARY 23rd, 1906.

IN GALLONS.

[ALL RIGHTS RESERVED.]

COUNTRY.	ILLUMINATING.		LUBRICATING.		RESIDUALS.		GAS OIL. (Solar)		BENZINE.		FUEL OIL.		OTHER DESCRIPTIONS.		TOTALS.	
	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.
Austria ...	—	—	42,090	42,090	—	11,000	—	—	—	—	—	—	—	—	53,090	64,090
Belgium ...	—	240	6,420	39,770	11,000	11,000	—	—	1,620	1,620	—	—	—	406	8,040	42,036
Borneo ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Canada ...	—	—	—	—	10,000	10,000	—	—	—	—	—	—	—	—	10,000	10,000
Germany ...	18,600	637,780	47,060	160,470	—	—	—	—	—	2,320	—	—	—	4,980	65,660	815,550
Holland ...	—	—	—	—	—	—	—	—	—	773,600	—	—	—	6,120	—	779,720
Roumania ...	—	1,360,000	—	—	—	—	—	—	—	—	—	—	—	—	—	1,360,000
Russia ...	745,280	3,233,870	—	800	—	—	—	—	—	—	—	—	—	5,410	745,280	3,240,080
Sumatra, &c	—	—	—	—	—	—	—	—	—	930,000	—	—	—	—	—	930,000
U.S.A. ...	—	5,589,541	296,760	2,148,330	—	430,198	—	5,009,920	180	180	—	—	33,600	79,600	330,540	13,247,769
Other Countries	—	—	—	1,760	—	—	—	—	—	480	—	—	300	300	300	2,540
	763,880	10,821,431	392,330	2,393,220	21,000	462,198	—	5,009,920	1,800	1,708,200	—	—	33,900	96,816	1,212,910	20,491,785

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

SPIES PETROLEUM CO., LTD.—The output for the week ending Jan. 21st was 130,145 poods, or 2,099 tons.

RUSSIAN PETROLEUM AND LIQUID FUEL CO., LTD.—The production for the week ending January 21st was 130,000 poods, or 2,096 tons

BAKU RUSSIAN PETROLEUM CO., LTD.—The production for the week ending January 20th was 290,000 poods, or 4,675 tons.

THE EUROPEAN PETROLEUM CO., LTD.—The production for the week ending 21st January, 1906, was 90,792 poods, or 1,464 tons.

◆

BATOUM PETROLEUM SHIPMENTS.

The following were the shipments of petroleum products from Batoum in 1905, compared with 1904 (in thousand poods):—

	Illuminating oils		Residuals		Other products.	
	1904	1905	1904	1905	1904	1905
To Europe ..	40,335	19,783	1,392	—	13,403	8,409
To the East ..	23,498	9,326	77	—	307	367
To Russian ports	4,615	2,463	13	—	223	241

◆

The Bustenari Co. has now 29 producing boreholes which are yielding 410 tons of oil daily. It also has 22 more boreholes, of which 10 are expected to reach the oil stratum, whilst the remainder may strike oil within a week or two.

PRODUCTION OF NATURAL SODA IN WYOMING FROM WELLS.

A product of several tons a day is now obtained from the natural soda wells at Green River, Wyoming.

In 1895 the Green River Fuel and Oil Co. drilled a well 700 feet in search of oil or coal, but losing their tools at that depth, the drilling was suspended. Meantime, a stream of water had been struck at about 125 feet, which was shewn on analysis to contain two pounds of hydrate sodium carbonate per gallon or three-fourths pound of dry sodium carbonate N_{a2} CO_3 per gallon. The striking peculiarity of the discovery consisted in the purity of the sodium carbonate and almost entire absence of sulphates and chlorides.

Analyses by various chemists of the water at the time of its discovery have shewn the following results:

By Prof. W. L. Robinson, Omaha, Neb.—

	Per cent.
Silica	0·06
Sulphuric acid	0·02
Aluminium	0·02
Sodium chloride	0·02
Sodium carbonate	99·88
Total	100·00

◆

A Well belonging to Messrs. Eberhard and Marchena at Apostolache has struck oil, and yields 80 tons daily.

The Telega Oil Co. has 26 producing wells which yield 230 tons of crude oil daily. They have 14 other wells in course of drilling, two of which are expected to reach the oil stratum within a few days.

The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XIV. *(New Series.)* February 3rd, 1906. No. 361.

Editorial Notes.

Tank Steamer Charters During 1905.

We have been favoured with the yearly returns compiled by Messrs. Funck and Co., of Billiter Street, E.C., of the tank steamer charters in the United Kingdom during the past year. The statistics are of great interest, for not only do they shew the number of voyages and the places of destination of the steamers chartered, but the rates per ton, while also the description of the various cargoes carried is given. Owing to pressure upon our space, consequent upon the publication of a number of important matters this week, we have been obliged to hold over the tank charters for last six months of 1905 until our next issue.

Sir Marcus Samuel's Advice.

The weighty address which Sir Marcus Samuel delivered the other day to the members of the Institute of Marine Engineers, of which body, by-the-bye, he is the president, is well worthy of close study. One must admit that in the hands of the marine engineers depends the future of the successful use of liquid fuel upon our sea-going craft, and his advice to the members present at that meeting to make themselves thorough masters of the construction and working of internal combustion engines, should be taken keenly to heart, for without doubt in the study of the immense advantages of such engines lies a brilliant and most profitable future for many marine engineers. The possibilities of the application of liquid fuel—either benzine or its heavier products—can almost be said to know no bounds, and when once practical knowledge takes the place of sheer ignorance, and when the lighter products of petroleum are allowed to be freed from the outrageous restrictions at present imposed upon them in this country (mainly, we admit, through ignorance) then will this new and economical power make remarkable progress both on land and sea. To Sir Marcus the oil trade owes an everlasting debt of gratitude for many things, not the least of which is his most recent address before the Institute of Marine Engineers.

America's Petroleum Exports in 1905.

From the statistics which have just been published and which are recorded on another page, of the exports of petroleum and it products from America during the past twelve months, it appears that the figures in amount have passed all previous records in petroleum exportation, and, therefore, unmistakably shew the growth of America's export trade. In round figures these amounted to no less a quantity than 1,165,000,000 gallons as compared with 985,000,000 gallons for the preceding year, thus shewing an increase of about 85,000,000 gallons. But this gigantic export trade was only maintained at fairly low prices, for competition from other countries necessitated the market's being cut in quotations; consequently the export trade for the year was, in point of value, somewhat below that for the previous twelve months, the value of the trade in petroleum for 1905 being $76,000,000 as compared with $78,000,000 for 1904. But the increase in America's petroleum export trade has not been so great as might have been expected, for even four years ago—for 1902—there were over 1,000,000,000 gallons exported. The figures for the past year, however, have their significance, for they shew that in spite of new sources of petroleum supply being found and developed with all the energy that man can command, America has, during the past twelve months exported four times the quantity of petroleum products that were used in this country during that same period.

Batoum Petroleum Export Trade.

From Batoum comes the news of greater activity in the petroleum export trade. The committee of the Baku refiners' combine, whose term of existence is drawing to an end, are anxious to deliver the oil under their contracts, and for an early clearance of their stocks of kerosene at Batoum, the storage of which in rented tanks is very costly. The shipments are intended mainly for English ports, and the total shipments for last week from Batoum amounted to over 1,200,000 poods. The exhaustion of the stocks and the irregular supplies from Baku are threatening to produce a crisis. The fall in the price of kerosene at Baku to 22 copecs should have stimulated deliveries to Batoum, and the accumulation of stocks there as in former times, but this is made impossible by the frequent stoppages on the railway. The trade in case oil is crippled, and for last week the exports did not exceed 11,000 poods. The manufacture of tins is also hampered, owing to the discontent among the late workmen of the case factories, yet in spite of these drawbacks, Batoum's export trade is shewing distinct signs of recovery from its recent state of stagnation.

Californian Production continues to Increase.

In our issue last week, we gave a number of details concerning the Californian oil industry during 1905, and now, thanks to the kindness of the secretary of the Californian Petroleum Miners' Association—Dr. C. T. Deane—we are in a position to give definite figures of the production of that State during the past twelve months. These shew that for 1905 California produced 35,000,000 barrels of oil, or about 7,000,000 barrels in excess of the total production for the preceding year. The average daily output of the wells, therefore, works out at about 96,000 barrels in 1905, as compared with 78,000 barrels in 1904, an increase which speaks volumes for the activity which is now being shewn in field operations, particularly in the Kern River, Coalinga, and Santa Maria and Lompoc districts. In the former field, however, though it is accredited with the largest production, the figures for the past year are lower than those for 1904, this being due, we doubt not, to the trouble which has been somewhat prevalent in regard to salt water, though we know from reports which reach us from time to time, that the tendency has been of late for operators to search further afield in the hope of opening up new territory. In all, California has over 2,000 wells now producing, and 200 either being drilled or about to be sunk, and with such activity prevalent in all directions, it is almost a certainty that its figures for this year will shew another advance in production.

Proposed Galician Pipe Line Combine. The amalgamation of the Galician Storage Co. with the pipe line of Messrs. Gartenberg, Schreier and Co. is about to take place, which amalgamation may be considered as the beginning of a movement toward the formation of a general combine of pipe line companies—a proposal that may probably be realised before long. It is a matter of vital importance for the Petrolea, which at the present moment has no adequate means for compelling outsiders to join it. It is expected that the pipe line combine will work in harmony with the Petrolea, and compel all producers to join the Petrolea Co. refusing to pump their oil. The Petrolea is now in a very precarious condition, and unless this scheme is successful it will certainly have to be dissolved.

THE OIL FIRE AT BATTERSEA.

A fire broke out on Saturday last upon the premises of Messrs. S. Bowley and Sons, of Wellington Road, Battersea, and destroyed a quantity of oil and spirit. As in many other cases, the daily newspaper reports of the conflagration have been very misleading, not to say exaggerated. As a matter of fact, the fire occurred in the linseed oil, and not the petroleum spirit department of the works, but spread to the oil storages. One of the evening newspapers told its readers that tons of petrol flowed into the Thames and set it alight, while a barge containing spirit was burnt to the water's edge. Some spirit did get into the Thames, but this was caused because the firemen, for some unknown reason, pulled down a dividing wall between the works and the Thames. As it was, however, the fire was localised, and, apart from some of the departments of Messrs. Bowley being destroyed, no other damage was done. The barge to which we have referred was in no way damaged; it simply became submerged owing to its getting full of water. Business is being carried on at Messrs. Bowley without interruption.

PETROLEUM IMPORTS INTO GERMANY DURING 1905.

The total imports of petroleum and petroleum products into Germany during the past year were 1,225,960 tons as compared with 1,229,183 tons, thus shewing a decrease of 3,223 tons.

Of the total quantity imported, the refined oil, which pays an import duty of £3 per ton, amounted to 948,478 tons, as against 970,596 tons, a decrease of over 22,000 tons. The refined oil was imported from the following countries as under :—

United States ..	770,829 tons against	777,140 tons in 1904
Russia	118,878 ,, ,,	131,338 ,,
Austria-Hungary ..	50,892 ,, ,,	42,809 ,,
Roumania	1,904 ,, ,,	7,020 ,,

Of lubricating oils, 143,926 tons were imported during the year, as against 142,929 tons in 1904, of which quantity Russia imported 66,915 tons (75,170 tons in 1904); America, 60422 tons (62,730 tons in 1904); and Austria, 6,502 tons, the remainder being divided between several countries.

The imports of refined oil were valued at 70,652,000 marks as compared with 72,307,000 marks for 1904, and lubricating oils 19,027,000 marks as against 18,827,000 marks in 1904. The value of benzine sold in Germany last year was 9,364,000 marks as compared with 8,165,000 marks, which was the value of the benzine in 1904.

THE OPERATIONS OF THE BAKU REFINERIES.

STATISTICS FOR JUNE AND THE FIRST HALF OF 1905 (in poods).

I.—Manufacture of Illuminating Oils.

Distillation.

	Submitted to Distillation.			Products Received.				
	Crude.	Other Products.	Total.	Kerosene.	Residuals.	Other Products.	Loss.	Fuel used.
June, 1905 ..	31,637,871	571,069	32,208,940	6,736,744	23,089,387	1,518,635	864,174	1,046,662
January-June, 1905	196,666,829	2,211,742	198,878,531	50,025,053	135,346,637	7,936,861	5,569,420	6,987,950
January-June, 1904	252,377,584	1,792,599	254,170,183	80,447,850	159,265,396	6,898,864	7,558,063	9,440,302

Refining.

	Submitted to Refining.			Refined Products Obtained.			Chemicals used.	
	Kerosene.	Other Distillates.	Total.	Kerosene.	Other Products.	Loss in Refining.	Acid.	Soda.
June, 1905.. ..	6,668,462	15,978	6,684,440	6,505,782	13 726	164,932	30,406	11,937
January-June, 1905	48,025,875	235,441	48,261,316	46,730,869	205,035	1,325,412	259,428	95,666
January-June, 1904	79,396,632	329,491	179,726,123	76 935,496	306,500	2,484,127	497,311	180,522

II.—Manufacture of Lubricating Oils.

Distillates Received.

	Machine Oil.	Spindle Oil.	Cylinder Oil.	Goudron.	Solar Distillates.	Residuals.	Other Distillates.	Loss in Distilling.	Fuel used.
June, 1905.. ..	1,198,346	163,408	54,190	718,005	1,238,703	1,252,864	6,410	261,478	609,496
January-June, 1905	5,790,351	641,793	226,096	3,858,842	6,381,951	4,136,330	51,183	986,978	3,850,336
January-June, 1904	7,217,520	1,078,895	243,043	4,047,302	8,580,655	6,048,198	112,446	1,741,544	3,828,081

Refined Products Received.

	Spindle Oil.	Machine Oil.	Cylinder Oil.	Loss in Refining.	Chemicals used.	
					Acid.	Soda.
June, 1905	157,156	1,006,739	38,552	138,318	51,393	5 598
January-June, 1905	542,010	4,834,922	139,533	637,182	75,551	29,271
January-June, 1904	1,007,596	5,852,399	120,625	819,399	329,755	30,357

SIR MARCUS SAMUEL AND THE MARINE ENGINEERS.

THE FUTURE OF BENZINE AS A MOTIVE POWER.

Sir Marcus Samuel, President of the Institute of Marine Engineers, delivered his presidential address to the members of the Institute at the headquarters, 58, Romford Road, Stratford, London, E., the other evening, which will be read with special interest by all connected with the petroleum industry.

Sir Marcus said that although he prided himself upon being a practical shipowner, he thought he might also pride himself upon the fact that he knew little of the details of engineering. He had always found that the wisest man was he who left questions of highly technical detail to those who understood them. As he had been extremely fortunate in being closely associated with Sir Fortescue Flannery, he had not felt it necessary to go personally into any details of engineering. But, fortunately, in connection with the employment of engines, he had, through his business, acquired a very intimate knowledge of two factors which he ventured to say were going ahead, and would have an enormous influence on the future of marine engineers. When the poet spoke of "summoning spirits from the vasty deep," he did not for a moment suppose that he had in his mind petroleum or benzine. But, nevertheless, that particular spirit was destined to play a part which it was quite impossible to exaggerate in the future development, not only of steamers, but also of sailing ships. If he might venture on a word of advice to those present he would say—make yourselves entirely masters of the construction and working of the internal combustion engine. Let them remember that they would see exemplified in their daily lives the power of petroleum properly applied. He would like to point out a few of the enormous advantages of the internal combustion engine. Take, for example, a sailing ship. The enormous possibility of saving labour on such a vessel was manifest, because the internal combustion engine could be started at a single moment's notice. He supposed he would not be exaggerating when he said that it did not take two minutes to start the engine, and the moment the work was done the consumption of fuel ceased. The possibilities of its application were so great that he could hardly enumerate them all. On his yacht, a vessel of 450 tons, it took eight or ten men to hoist the mainsail. Yet that operation could easily be done by having, say, a 20 horse-power motor on the vessel. The industry associated with the internal combustion engine was still in its infancy, and some interested parties had been at pains to raise a scare as to the supply of benzine. They might take it from him, however, that he saw no possibility of any demand overtaking the supply of benzine within measurable distance of time. They had practically a virgin territory in Borneo, where they were producing about 14,000 tons per week of crude petroleum, and he was very sorry to tell them that they had to destroy 4,000 or 5,000 tons weekly, because they had not yet found a market for it. It had taken longer than he had anticipated to create markets for those invaluable products. And there were other vast sources—Sumatra, for instance, where the production of benzine was on an enormous scale. It remained for the marine engineers to carry the application of the internal combustion engine into their business. He had no hesitation in saying that, seeing the troubles they had with the donkey boilers, he would fit in every one of the vessels of their fleet an internal combustion engine. But they were faced with a great difficulty that nothing but common sense and great determination on the part of all those concerned in the use of that marvellous power would ever overcome. He referred to the outrageous restrictions which were put on the storage of benzine in this country. They did not find such restrictions in France or Germany, and he had constantly advocated that they should have a Minister of Commerce whose business it should be to have investigated the regulations prevailing in different countries for things which, if he had similar freedom, would aid our British manufacturers. The restrictions on benzine were so outrageous as entirely to prevent the fitting of those internal engines on board ship, because there was not a single port in Great Britain where they would be allowed in the harbour if they had on board anything like enough benzine to work the engine. During his presidency great improvements had taken place in the shipping world. They had seen the advent of the turbine in Transatlantic steamers, and those engines had proved an enormous success. But it had been left to the Japanese to be the first to order turbines which would use steam generated by liquid fuel, and his firm had been entrusted with the order for the material for building two of the largest and fastest boats for navigating the Pacific Ocean. Those boats were to be fitted with turbines, contracted for, he hoped, in this country, and they were to burn liquid fuel. His friends, the Japanese, had been very wise and very right in so deciding. Those boats were to run between San Francisco and China and Japan. The development in regard to liquid fuel in California had been stupendous. Within a few years, say two or three years, the production of liquid fuel in California had amounted to millions of tons annually. And there had been very large discoveries of liquid fuel in Mexico, and storage was being erected by Sir Weetman Pearson for upwards of 100,000 tons. He thought that very great credit was due to the British navy, and to Sir John Dunston for being the first to move in a large sense in the use of liquid fuel. One of the greatest advantages of the liquid fuel was that with perfect combustion there was not a vestige of smoke, and they could put on a turn of speed which it was quite impossible to obtain with coal. He had no hesitation in saying that the wear and tear on the boilers was infinitely less with liquid fuel than with coal. They did not "soot-up" the tubes, and they could maintain a perfectly even temperature to almost a degree in any circumstances of weather Those advantages were so overwhelming that he believed they would appeal to every engineer.

At the conclusion of his address, Sir Marcus Samuel presented to Mr. D. K. Roberts, of Cardiff, the "Denny" gold medal, which he had been awarded for his paper on "The Application of Electrical Power on Cargo Steamers."

AMERICAN NOTES

Light Shipments.—Port shipments of Texas oil for the first half of January were lighter than in any similar period for several months, and only amounted to 169,000 barrels of all grades.

To Test Unproven Territory.—It is understood that the Prairie Oil and Gas Co. will shortly put down a number of test wells upon unproven territory lying in the districts of Ochelata and Ramona.

Decrease in Pennsylvanian Oil Stocks.—During the past year there was a decrease in the net stocks of Pennsylvanian oil of quite 40 per cent., and at the close of the year the stocks were lower than they had been for 25 years.

Canadian Crude Oil Prices.—The prices for Canadian crude oil are as follows:—At Petrolia, $1·34 (with Government bounty 52½ cents), total, $1·86½; at Oil Springs, $1·41, less pipeage (with Government bounty 52½ cents), total, $1·93½.

Oil *versus* Coal.—The *Oil, Paint and Drug Review* says that the colliery owners of British Columbia are commencing to squirm at the sharp competition inaugurated by the introduction of Californian oil fuel into that country for steam purposes.

To Drill near Alvin.—It is reported upon what appears to be good authority that a French company is about to sink a test well on Rowan's ranch, near Alvin, Texas. It is further reported that lumber has already been hauled to the spot for that purpose.

Californian Oil on Roads.—Californian oil is now very largely used upon the roads of the State. It is stated that no less than 600 miles of city streets, and over 2,500 miles of country roads, are now oiled in California. During the present year, Californian oil for roads is to be largely used in many of the cities of America.

An Important Purchase.—From Pittsburg we learn that the Philadelphia Co. has acquired the holdings of the Fairmount and Grafton Gas Co. in West Virginia, comprising about 10,000 acres of territory, in which fourteen wells have been drilled, ranging in capacity from 1,000,000 to 10,000,000 cubic feet per day. The territory has so far been little developed.

A Deep Sand Gusher.—A dispatch from Pittsburg states that the Philadelphia Co. has the distinction of having made a discovery which opens out possibilities in the way of new producing territory. Last summer the company drilled a well and obtained a gas producer in the fourth sand. Recently it was decided to drill the well deeper as the gas force had subsided, and the well was no longer a profitable producer. The well is now producing about 100 barrels daily.

Davis Hill Attracting Attention.—The locality known as Davis Hill, in Liberty county, is now the object of special attention, says the *Oil Investors' Journal*, on the part of Texas operators. The district in which tests have already been drilled is about 12 miles north-west of Batson, and 22 miles from the town of Liberty. It is generally believed that there is the presence of a regular oil formation running through the locality, and consequently much activity in drilling is to be noted.

Humble Production Decreases.—Despite continued activity in drilling in the Humble field, the daily production continues to decline, and the average per day for the first half of January shewed a decrease of 5,000 barrels daily as compared with the daily output for December. Salt water has now made its appearance in the older portion of the field, and this to some extent accounts for the continuance in the decline. The field is not now doing more than 15,000 barrels per day.

In Tennessee.—A consolidation of interests has recently been taking place in Tennessee. Since the suspension of work in Poplar Cove by the Obed's River Oil Co. its stock has been absorbed by the Tennessee Land and Coal Co., which company also has taken over the stock of the Federal Oil Co., of Kentucky, as well as having a controlling interest in the Poplar Cove Oil Co. This company under its present organisation possesses about $50,000 worth of machinery, and in addition to the lands it holds in fee, it has 25,000 acres of leases in Kentucky and Tennessee upon which operations have just been commenced. This company has now an authorised capital of $2,000,000.

AMERICAN PETROLEUM EXPORTS.

STATISTICS FOR DECEMBER.

According to the official publication of the Washington Bureau of Statistics, the exports of petroleum from America from the various ports during December were as under:—

	1904. Quantities. Gallons.		1905. Quantities. Gallons.
CRUDE—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	5,590,848		6,948,387
New York	—		8,663
Philadelphia	1,365,664		273,770
Galveston	168		1,411,507
Total	6,956,680	Total	8,642,327
Total value for the month,	1904		$423,343
,, ,, ,,	1905		$462,595
NAPHTHAS—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	41,462		—
New York	796,954		258,127
Philadelphia	3,598,821		12,000
Galveston	—		—
Total	4,437,237	Total	270,127
Total value for the month,	1904		$355,393
,, ,, ,,	1905		$47,450
ILLUMINATING—			
Baltimore	2,737,224		670
Boston and Charlestown	15,492		9,724
Delaware	—		46,232
New York	29,769,006		46.541,297
Philadelphia	18,278,198		22,383,499
Galveston	—		3,261,545
Total	50,799,920	Total	72,242,967
Total value for the month,	1904		$3,552,384
,, ,, ,,	1905		$4,591,388
LUBRICATING AND PARAFFIN—			
Baltimore	240,350		316,488
Boston and Charlestown	8,115		13,262
Delaware	—		—
New York	6,084,307		7,821,060
Philadelphia	2,824,846		4,437,149
Galveston	—		11 375
Total	9,157,618	Total	12,599,294
Total value for the month,	1904		$1,267,754
,, ,, ,,	1905		$1,419,985
RESIDUUM—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	—		1,506
New York	546,000		2,371
Philadelphia	1,290,492		6,062,657
Galveston	—		1,070,690
Total	1,836,492	Total	7,137,224
Total value for the month,	1904		$57,583
,, ,, ,,	1905		$206,479
TOTAL MINERAL OILS—			
Baltimore	2,977,574		317,118
Boston and Charlestown	23,607		22,986
Delaware	5,632,310		6,996,125
New York	37,196,267		34,631,518
Philadelphia	27,358,021		53,169,075
Galveston	168		5,755,117
Total	73,187,947	Total	100,891,939
Total value for the month,	1904		$5,656,657
,, ,, ,,	1905		$6,727,897

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Messrs. Thomas Piggott and Co., makers of pipes, tanks, and steel structures, have recently secured orders for the following:—20 pressed steel standard tanks for Buenos Ayres; rivetted steel chimney 6 feet diameter by 125 feet high; pit-head frame for South Wales; pressed culvert pipes 36 inches diameter for South Africa; and rivetted rectangular flues for Newcastle power station.

AN OPTIMISTIC VIEW OF THE ALBERTA OIL FIELD.

A Californian oil expert has recently been giving his views in regard to the Alberta oil field in Manitoba. He states that the "underground lake of oil" at Alberta covers over 1,000 square miles in area, and extends from the Manitoba boundary northwards to the Athabasca River. Everywhere between those points where borings have been made, gushers of high-grade oil have been discovered.

The same gentleman estimates that there is enough oil in Alberta to supply the United States and British navies with fuel for all time, and the territory only needs proper development to rival any of the largest oil fields in existence.

The above plainly expressed opinion will come as a surprise to many of our American friends, who have been very ready to decry the possibilities of Alberta as an oil-producing region. It is, however, an established fact that over large portions of Alberta oil is lying on the ground in surface seepages, and, in many cases, the farmers are using the oil which collects on the pools for lubricating machinery.

MORE DETAILS CONCERNING THE PANAMA PIPE LINE.

As time goes on, definite information comes to hand concerning the proposed pipe line to be constructed across the Isthmus of Panama by the Union Oil Co., of California, in order that Californian oil may enter into competition with other liquid fuels upon the European markets.

It appears that there have been six applicants for rights to lay the pipe line down, but the Union Oil Co. was the only one which specified the price of the oil, if used by the Government, and whose offer was otherwise sufficiently definite in the opinion of the Government officials. The licence for the construction of the pipe has, we gather, now been granted, but it is expressly provided that the licence shall not be exclusive, so that other companies may therefore hereafter compete for the business.

Among the other companies which applied for the licence to build the pipe line were the Texas Co., of Texas; the Associated Oil Co., of California; the Gulf Refining Co., of Pittsburg; and the Higgins Oil and Fuel Co., of Beaumont, Texas.

The *Oil Investors' Journal* learns that articles of incorpotation of the Union Steamship Co., which will be operated in connection with the Union Oil Co., have been filed in San Francisco, the capital stock being $5,000,000. It is stated that the objects of the company include that of entering into the business of the transportation of oil between the Pacific coast ports and Panama and the Orient, as well as to run oil carrying vessels between the eastern side of Panama and various ports in Europe.

The fleet of steamers which the Union Oil Co. is now running on the Pacific coast includes the "Argyll," a tank steamer of 1,125,000 gallons capacity, formerly owned by the Michigan Steamship Co., and built 14 years ago at West Hartlepool; the tank steamer "Whittier," a comparatively new vessel built in San Francisco in 1903, having a gross tonnage of 1,296; the "Fullerton," a sailing vessel registered at Port Harford, built in Alameda in 1902, and owned until recently by the Mission Transport and Trading Co.; and the "Santa Paula," built at Fairhaven in 1900.

The Union Steamship Co. has now purchased the following tank steamers which will in all probability be used for the European trade as soon as the new pipe line is completed :—"Lansing," built at Newcastle in 1890, having a capacity for 2,000,000 gallons of oil in her tanks; the "Washtenaw," built in West Hartlepool nine years ago, and having a carrying capacity for 1,240,000 gallons; and the "Roma," built in Sunderland two years later, with a carrying capacity of about 1,160,000 gallons. The whole of these tank steamers are fitted for burning liquid fuel, and are of modern type, all having been built in the ship-building yards of this country.

ROUMANIAN NOTES.

The Water Flush Commission.—The commission appointed bp the Roumanian Government to draft regulations for the use of water-flush boring systems have completed their labours and submitted their report to the council of Ministers.

December's Exports.—According to provisional figures published by the *Moniteur du Petrole Roumain*, the exports of petroleum products from Roumania in December were :—Crude oil, 659 tons; illuminating oil, 17,616 tons; benzine, 363 tons; total, 18,638 tons. In December, 1904, the total was 4,713 tons.

The Speranto Co.—The annual general meeting of the Speranto Co. was held at Bucarest on the 29th of January. The accounts for the financial year, which ended on October 31st, 1905, shewed a loss of 13,061 francs. The company's lands are all held on lease by the Romano-American Co., but so far their exploitation has not yet developed to any great extent.

The Moreni Field.—Two more wells of the Romano-American Co., situated on a hill near Pleasha, in the Moreni field, have struck oil. A number of new boreholes are to be started in different parts of the Moreni field. Messsrs. Rucareanu are starting a borehole at a locality called "In Ograda," near Stavropoleos. The Romano-American Co. is going to drill a well in the same locality. The wells now being drilled at Bana are rapidly gaining in depth, and the one belonging to Messrs. Loewenbach and Co. has already passed through the salt stratum.

Speculation has been Rife in Roumanian petroleum circles as to the exact mean of the definition of proven and non-proven petroliferous lands as referred to in the new law regarding the concessions on Roumanian State petroliferous lands. Mr. Lahovary, the Roumanian Minister of Domains, in a recent speech defined as proven lands those on which there were borings or hand wells in exploitation. Non-proven lands are those which form an extension of the zones of the former, but are not yet developed. Of the former the Roumanian State possesses 14,350 acres, and of the latter about 205,000 acres.

Modifications Wanted.—The Roumanian law for the consolidation of petroleum concessions has in practice been found wanting, and a Commission has been nominated by the Minister of Justice to consider the necessary modifications. This commission consists of M. Lascar L. Catargi, deputy and petroleum producer; M. Panaitescu, President of the Tribunal of Prahova; M. G. Negoulescu, the well-known lawyer; and M. Luca Elefterescu, Prefect of Prahova. The last-named two gentlemen are largely interested in the petroleum industry. The composition of the Commission gives general satisfaction, as all the members are practical men with exceptional experience of the subject.

Oil and Gas Development in the Mid-Continental Field in 1905.

By *ERASMUS HAWORTH, of the United States Geological Survey.*

(Concluded from page 67.)

Gas.—The production of gas was greatly increased during 1905. Early in the year the Kansas Natural Gas Co. began buying property, and has continued that policy to the present. It now owns all the leases formerly owned by almost every big gas company in the State, and stands ready at all times to pay for any new developments that may be made. They now own nearly all the good production of Montgomery and Wilson counties, the two richest gas fields in the mid-continental area. From near Independence, south to the State line, wells with a daily capacity of 15,000,000 cubic feet are comparatively common, and some producing 30,000,000 cubic feet are known. One well measured when open (by using the Pitot tube, the mouth of which was placed a little to one side of the centre of an 8¼-inch pipe, gave a pressure of 38 pounds on the gauge attached; this is perhaps the largest well in the entire region.

A well drilled in during October near the State line, tested close to 35,000,000 cubic feet. In the Indian Territory some enormous gas wells likewise have been found, a number of which range from 15,000,000 to 20,000,000 cubic feet. The strongest wells are near the line between the Osage and Cherokee lands, some on one side and some on the other. In the vicinity of Bartlesville, gas is found in the sand above the principal oil sand. Frequently this gas is allowed to escape, and the drill sent on down to the oil. In other places gas is in a sandstone corresponding to the oil sand. Recently a number of strong gas-wells have been drilled two or three miles south-east of Bartlesville. Some of the strongest wells are found west of Ramona; in the vicinity of Pawhusky wells ranging from 8,000,000 to 15,000,000 cubic feet have been obtained.

The Kansas Natural Gas Co. now has its pipe lines laid northward beyond the Kansas River almost to Atchison and St. Joseph, with one branch leading west to Topeka and another line to Kansas City. A large pumping station is established at the little town of Petrolia, on the west side of the Neodho River, about midway between Humboldt and Chanute. Pipes from all over the gas field to the south converge at this point. Two 16-inch pipes are laid, side by side, from the pumping station to Ottawa; here they diverge, one going to Kansas City; the other, north to Lawrence, Leavenworth and Atchison. About three miles south of Lawrence a side line is carried westward to Topeka.

Gas is sold throughout these northern towns at 25 cents per thousand for domestic consumption, measured at about 8 ounces above atmospheric pressure. For manufacturing purposes it is offered at lower figures; but up to the present few factories have adopted its use, as gas cannot compete with coal for manufacturing purposes, unless sold considerably below any figures yet offered. All the important gas towns in Kansas and Indian Territory are still offering 3 cents gas to manufacturers; some of them in the Indian Territory are offering it at a lower price.

Refineries and Pipe Lines.—The Standard Oil Co. has a small refinery at Neodesha with a capacity of about 3,500 barrels crude per day, which has been kept in operation throughout the year at its full capacity. It has built a larger refinery at Sugar Creek, in the eastern suburbs of Kansas City, with a reported capacity of 6,000 barrels per day, and which began receiving oil early in the year. One 8-inch pipe line leads to the Sugar Creek refinery from Neodesha, with many laterals ramifying through the entire oil field to the south. At present, a second 8-inch pipe line is building to Sugar Creek. Also, an 8-inch line reaches from Sugar Creek to Whiting, Indiana, which was open for operation during the latter part of the year.

Large tank farms have been established at different places throughout the field, and at each refinery, the largest one at present being at Neodesha, with smaller ones at Humboldt, Caney, Bartlesville, Cleveland, Ramona, and perhaps other places. Tanks are still building at a rapid rate in order to keep ahead of production.

A number of small independent refineries are located in the State, one at each of the following places: Humboldt, Paola, Cherryvale, Niotaze and Longton. Those at Humboldt and Paola have been in operation the greater part of the year, consuming an aggregate of about 300 barrels per day. The others have not yet done much refining and are small.

Markets.—Until early in the year 1905, the Prairie Oil and Gas Co. made a somewhat arbitrary division of the Kansas oil field for the purpose of establishing prices. In all market quotations previous to this time, Kansas oil was graded as South Neodesha and North Neodesha, with the former bringing regularly 20 cents a barrel more than the latter. The highest price paid in the field was $1·38 for South Neodesha oil early in the year 1904. This quotation lasted but a few days when the price began to drop and gradually declined throughout the year, reaching 72 cents in December. The downward tendency continued until it reached the low price of 50 cents a barrel for the best Kansas-Indian Territory oil during the first half of 1905, at which point the market rested for months. In the middle autumn, a two-cent. advance was made, after which the market was stationary to the end of the year.

Early in the year, the old-fashioned way of grading oil into South Neodesha and North Neodesha was abandoned, and a gravity scale was adopted. Under this regulation, oil testing 32° B. or more was given the top price, and a decrease of 10 cents per barrel for each degree, or 5 cents for each half-degree, was put upon the lower grades of oil. Gravity tests were made by the gauger and were strictly enforced, often a shade of one-tenth degree causing a difference of 5 cents per barrel.

A portion of the oil from Montgomery county, all the oil from Chautauqua county in Kansas, and practically all from the Indian Territory-Oklahoma field tests 32° B. or more, some of it reaching as high as 37° B. or 38° B. Almost all the remaining Kansas oil tests below 32° B. Although a penalty of 5 cents for each half-degree was imposed on oil below 32° B., yet a corresponding increase was not made for that above 32° B., so that wells producing oil testing from 35° B. to 38° B., have never been more profitable than they would have been had their product been barely above 32° B.

Future Developments.—The success attending present operations in the Indian Territory is so great that future development will probably increase over the present production. Should the price of oil start upward with a fair promise of reaching $1 per barrel, almost every leaseholder in the oil region would begin drilling. Under such circumstances it is difficult to tell what the result would be. Could we have another year of such prices with a demand for the entire production, it would not be surprising if the field should reach a capacity anywhere from 75,000 to 100,000 barrels per day.

◆

AMERICA'S EXPORTS OF PETROLEUM FOR 1905.

America's exports of petroleum and its products again passed the billion-gallon point in 1905, and were the largest in amount on record, but in valuation there was a heavy decline from the preceding year. The total valuation was nearly $76,700,000, as against $78,200,000 in 1904, and about $70,345,000 in 1903. While the export trade in volume in 1904 was unprecedented, it was only maintained by reductions in the quotations of the year preceding.

Mr. Austin's report to the Department of Commerce and Labour shews that 100,891,399 gallons of mineral oils, valued at $6,727,897, were exported from the United States last December. This was a gain over the November record of 18,627,562 gallons in amount and $957,096 in value. Compared with December, 1904, there was an increase of 27,704,442 gallons in amount, and $1,071,240 in value. The exports for December, 1904, amounted to 73,187,947 gallons and were valued at $5,656,657.

For the twelve months ended with last December, America's petroleum exports amounted to 1,165,440,249 gallons, and were valued at $76,694,753, as compared with a total of 985,729,957 gallons, valued at $78,217,167 for the twelve months ended with December, 1904; that is, during the past year that country exported 179,647,292 gallons more oil than during the preceding year, but received $1,522,414 less for it. For the twelve months ended with December 31st, 1905, the total exports of petroleum and its products amounted to 985,729,957 gallons, and were valued at $78,217,167.

The exports for December were distributed as follows: Crude, 8,642,327 gallons; naphthas, 270,127 gallons; illuminating oils, 72,242,967 gallons; lubricating oil and paraffin, 12,599,294 gallons; and residuum 7,137,224 gallons. The total of mineral oils shipped from New York was 54,631,518 gallons; Philadelphia, 33,169,075 gallons; Baltimore, 317,118 gallons; Boston, 22,986 gallons; Delaware, 6,995,125 gallons; and Galveston, 5,755,117 gallons.

The following table gives the exports in gallons of mineral oil and its various products during 1905 and 1904:—

	1905.	1904.
Crude	102,264,117	95,974,645
Naphtha	26,801,456	22,837,347
Illuminating	858,839,713	745,742,071
Lubricating and Paraffin ..	110,901,506	87,439,482
Residuum	66,633,457	33,736,412
Total	1,165,440,249	985,729,957

In the following table is given the amount and value of the crude, illuminating, lubricating and paraffin oils, naphthas, and residuum exported for each month of the past four years:—

	1905.		1904.	
	Amount. Gallons.	Value. Dollars.	Amount. Gallons.	Value. Dollars.
January ..	81,183,722	5,599,848	70,566,073	5,908,432
February ..	65,922,993	4,459,431	70,654,509	6,143,004
March ..	106,342,469	7,528,178	67,604,189	5,812,472
April ..	102,724,003	6,765,649	97,241,371	7,432,319
May ..	95,390,157	5,927,120	69,418,367	5,469,420
June ..	101,808,202	6,382,891	86,946,610	7,041,341
July ..	104,744,103	6,399,762	96,888,252	7,074,094
August ..	104,266,155	6,833,287	84,519,152	6,580,890
September..	116,227,366	7,397,468	88,505,020	7,260,505
October ..	103.674,763	6,902,421	91,496,137	7,273,966
November..	82,264,377	5,770,801	88,702,330	6.564,067
December...	100,891,939	6,727,897	73,187,947	5,656,657
Total ..	1,165,440,249	76,694,753	985,729,957	78,217,167

	1903.		1902.	
	Amount. Gallons.	Value. Dollars.	Amount. Gallons.	Value. Dollars.
January ..	58,143,049	4,497,647	93,690,951	5,945,609
February..	68,866,613	4,958,132	65,362,168	4,289,561
March ..	62,132,628	4,670,910	87,432,293	5,417,248
April ..	77,324,094	6,036,878	87,833,201	5,682,958
May ..	75,552,756	5,780,415	88,636,687	5,917,644
June ..	72,022,095	5,388,684	96,011,012	5,770,691
July ..	85,037,703	6,192,968	85,603,512	5,551,864
August ..	77,688,035	5,747,281	88,105,443	5,383,496
September	85,525,511	6,379,476	80,826,179	4,812,986
October ..	80,948,629	6,755,878	98,944,640	6,391,657
November.	79,403,837	6,482,604	80,940,103	5,284,916
December.	85,652,621	7,454,021	92,577,224	6,540,718
Total ..	908,297,571	70,344,894	1,045,963,413	66,988,748

◆

BAKU PRODUCTION IN DECEMBER.

The total production of crude oil at the Baku oil fields in December amounted to 18,265,730 poods, of which 803,000 poods were obtained from spouters. The production at Bebe-Aibat amounted to 6,402,494 poods. The production of the leading firms was as under:—

	Poods.
Nobel Bros.	4,000,000
Caspian and Black Sea Society	1,900,000
Baku Naphtha Co.	1,700,000
Baku Russian Petroleum Co., Ltd. ..	800,000
Zoubaloff	800,000
Assadulaeff	800,000
Schibaieff Petroleum Co., Ltd.	700,000
M. Nagieff	600,000
Moscow-Caucasian Co.	500,000
Bibi-Eybat Petroleum Co., Ltd.	500,000
European Petrolum Co., Ltd.	400,000
Benkendorf and Co...	400,000
Russian Naphtha Co.	400,000
Naftalan Co.	300,000
Schikhovo Co.	300,000
Russian Petroleum and Liquid Fuel Co...	300,000

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{11}{16}$-$\frac{13}{16}$
Baku Russian Petroleum	£750,000 Ord.	£1	3/9-4/3
,, ,,	£650,000 $5\frac{1}{2}$% Pref.	£1	6/9-7/9
Californian Oilfields	£250,000 Ord.	£1	$6\frac{1}{2}$-$6\frac{5}{8}$
European Petroleum	£550,000 Pref.	£1	$\frac{3}{16}$-$\frac{5}{16}$
,, ,,	£550,000 Ord.	£1	1/0-2/0
,, ,,	£376,000 Deb.	£100	87-90
Russian Pet. & Liquid Fuel	£500,000 $6\frac{1}{2}$% Pref.	£1	13/6-14/6
,, ,,	£600,000 Ord.	£1	14/0-15/0
Schibaieff Petroleum	£575,000 6% Pref.	£5	$3\frac{5}{8}$-$3\frac{7}{8}$
,, ,,	£575,000 Ord.	£1	9/6-10/6
Shell Transport & Trading	£2,000,000	£1	22/0-23/0
,, ,, ,,	£1,000,000 Pref.	£10	$9\frac{1}{4}$-$9\frac{1}{2}$
Spies Petroleum Company	£312,500	10s.	8/3-8/9

SCOTCH COMPANIES.

Supplied by Messrs. Maclean and Henderson, Stirling.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. $8\frac{1}{2}$ pd	£199,750	£10	$18\frac{1}{16}$
Do. 6% Cum. Pref.	£100,000	£10	$12\frac{1}{16}$
Burmah Oil, Ord.	£1,100,000	£1	58s. 0d.
Do. Pref.	£250 000	£1	55s. 6d.
Dalmeny Oil Co., Ord. (7 paid)	£37,800	£8 10s.	$8\frac{1}{2}$
Do. 5% Pref.	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	$18\frac{1}{2}$
Do. New (£8 10s. pd.)	£131,750	£10	$16\frac{1}{4}$
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	81s. 0d.
Do. 6% Cum. Pref.	£100,000	£10	$12\frac{3}{4}$
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	37s. 0d.
Young's Paraffin Co., Ltd., Ord.	£452,808	£4	65s. 0d.
Do. "B" Deb.	£150,000	£100	150

RUSSIAN COMPANIES.

Company.	Nom. Value in Roubles.	Quotations on Jan. 27.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	430	435
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	3,750	3,800
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	168	171
Naptha Trading Co., Petrol.	250	—	—
Nobel Bros.	5,000	8,575	8,650
,, ,,	250	—	—
Rops and Co., V.	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

DUTCH COMPANIES.

Company.	Quotations Jan. 24th.	Quotations Jan. 31st.	Florins.
Arnhemsche Petroleum Mij.	81	81	1,000
Dordtsche Petroleum Mij. (Pref.)	126	126	500
,, ,, ,, (Deb. $4\frac{1}{2}$%)	$102\frac{3}{4}$	$102\frac{3}{4}$	1,000
Elzasser Petroleum Mij.	$44\frac{1}{2}$	$44\frac{3}{8}$	1,000
Gaboes ,, ,,	$19\frac{3}{4}$	$19\frac{3}{4}$	—
Holl. Rumeensche Petroleum Mij.	22	$19\frac{3}{4}$	1,000
Int. Rum. Pet. Mij.	91	91	500
Java Petroleum Mij.	30	30	1,000
Koninklyke Nederl. Pet. Mij. Shares	$390\frac{5}{8}$–392	$394\frac{1}{2}$–396	250-1,000
,, ,, Share certificates	$394\frac{1}{2}$	391–395	1,000
Mœara Enim Petroleum Mij.	$108\frac{1}{2}$	$108\frac{1}{2}$	100
,, ,, 1-1,000 Oblig. 5	102	102	250-1,000
"Moesi Ilir" Petroleum Mij.	$32\frac{1}{2}$	$33\frac{1}{2}$	—
Nederl.-Rumeensche Petroleum Mij.	$15\frac{7}{8}$	16	
Nieuwe Ned. Petroleum Mij. And.	$55\frac{1}{4}$	$55\frac{1}{4}$	1,000
Oliebronnen in Hannover Mij.	182	177	—
Panolan Maatschappij Cert.	$350\frac{1}{2}$	$350\frac{1}{2}$	—
Perlak Petrol. Mij. (6% cum. pr. A.)	$137\frac{1}{2}$	138	1,000
,, ,, (Common)	93	$92\frac{5}{8}$	—
Sumatra-Palembang Petroleum Mij	59	$58\frac{3}{4}$	500

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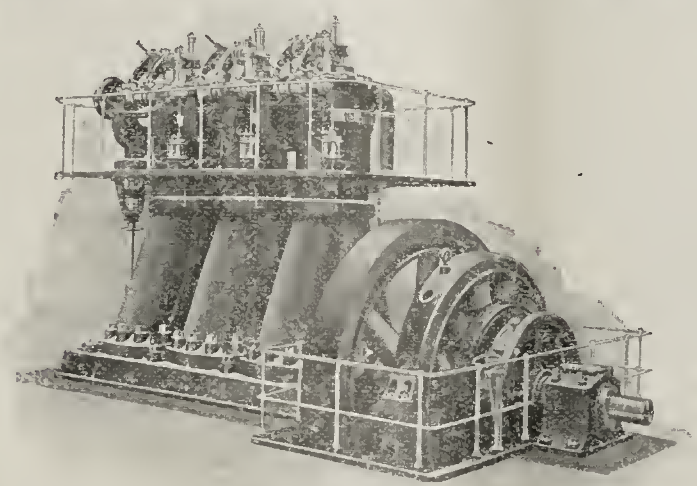

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The Petroleum Industrial & Technical Review, Ltd.

Saturday, February 3rd, 1906.

THE RUSSIAN PETROLEUM INDUSTRY DURING 1905.

WITH the announcement of the statistics of the production at the Baku oil fields during December, we are in a position to comment upon the Russian petroleum industry of 1905 with a degree of definiteness. The past twelve months will long be remembered by those interested in any way in the Russian petroleum industry, for during their run they have witnessed events absolutely unprecedented in the history of oil field operations. The Russian industry has passed through one crisis only to enter another even more acute, and from beginning to end, its petroleum trade—every branch of it without exception—has, to put it mildly, been in a state of transition. As the year came in, oil field work which had been suspended for some weeks consequent upon a workers' strike was re-started, but before the industry had been able to regain its proper course, it was to some extent disorganised by the effect of a number of dastardly massacres in Baku upon the workers. For a time operations on the oil fields were not very seriously impeded, and it seemed as though the trouble had passed. But racial discontent again made itself manifest, and open revolution—such as never before had been witnessed—broke out; the oil field properties were damaged, incendiary fires wrought great havoc, plunder was the order of the day, and lawlessness held the upper hand. In the meanwhile, the petroleum trade was in a state of stagnation, from which, even at the present time, it has not completely recovered.

Under such circumstances it was impossible for the petroleum industry to run its ordinary course, and the the knowledge that the Baku fields for the past year have only yielded something like 400,000,000 poods of oil, or a decrease of over 200,000,000 poods, when compared with the annual output for the preceding four years, will come as no surprise to most of our readers. It is extremely unfortunate that at a time when Russia's petroleum industry should have strengthened its grip upon the Empire's commerce, when it should have extended its export, and even its home trade, and thus made a distinct step forward, troubles overtake it which cause a serious retrogade movement to set in throughout every branch of its petroleum industry.

At normal periods the monthly production of the Baku oil fields amounts approximately to 55,000,000 poods per month, but, owing to the various disturbing influences at work throughout the past year, the production in no single month reached that amount, while for many months it was frequently less than one-half, and in some cases little more than a quarter that quantity. In round figures the production from the fields, compared with that for the preceding year, may be taken as under: —

	1905. Poods.	1904. Poods.
January	43,000,000	45,000,000
February	42,000,000	46,000,000
March	49,000,000	51,000,000
April	47,000,000	52,000,000
May	30,000,000	56,000,000
June..	46,000,000	55,000,000
July	47,000,000	55,000,000
August	32,000,000	56,000,000
September	9,000,000	54,000,000
October	12,000,000	60,000,000
November	30,000,000	61,000,000
December	18,000,000	23,000,000
Total..	403,000,000	614,000,000

The above figures in themselves shew to what a serious extent the production of crude oil has been interfered with during the past twelve months, and a decrease of over 30 per cent. in the total output of the wells requires much explaining away. The monthly average for the past year has been little above 30,000,000 poods, an amount all too small to meet the demands, and the consequence is that such a serious diminution as this has affected every branch of the industry, and thrown it for the time being totally off its feet. Whether we turn to the refining branch or the export trade we plainly see the havoc which has been brought about by an absence of a sufficient quantity of crude oil. The refiners have suffered, and are still suffering very heavily by reason of the smaller quantity of crude they have for treatment, while as regards the export trade, it has been all but strangled as a result of the oil field troubles, and it will certainly take a long time before the export of Russian products again assumes that magnitude which is associated with the past history of the petroleum industry in the Caucasus.

At the best, the decrease in production is enormous, and is such that cannot but do incalculable harm to the industry as a whole, but, apart from this, there is an even more serious aspect that now awaits settlement—that is the general position of the Russian oil trade.

We have constantly pointed out that in spite of the progress which has for many years been made in connection with Russia's petroleum industry, the lack of systematic organisation, and the presence of so many factions each fighting against the other, has gone a long way to pull the country's oil trade down to the lamentable position in which we see it to-day. We admit that for a long time, the Government has not done what it might to assist the industry to better things; it has not given that protection to life and property at the oil fields which those interested therein had a right to demand, nor has it treated the trade fairly in regard to freight rates, etc.

But as a result of those terrible events of late in the Caucasus, matters are being remedied, and the shortcomings of the Government are now being righted. Therefore when contentment and peace are permanently restored in the Caucasus, many of those things which have served only to hinder progress in the past will be removed. Thus then it is time for organisation all round, and the pity is that the Russian producer and the refiner, as well as the exporter, has not seen the necessity for this long ago.

New openings have to be found in order that the export branch of the trade may be extended, while it is imperative that the markets at home must be developed, and the present excise duty either lowered or abolished altogether.

To some it may appear premature to argue the necessity for such steps, seeing that a strong feeling of unrest is prevailing throughout the Russian empire, but now that reforms are in the air, a great responsibility rests with those interested in the Russian petroleum industry to see that they, too, take up their share of the work, and see that the oil trade of the Caucasus is lifted from its present ignominious position. Certainly the results of the past year's operations in every branch of the industry are in their best light very disappointing and full of significance.

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LONDON OIL SHARE MARKET.

FRIDAY, FEB. 2ND.

Business continues in a state of suspended animation in the Oil Share group of the London Stock Exchange for there is scarcely an alteration to report in the various values since we last wrote. On Saturday Anglo-Russians were $\frac{1}{16}$-$\frac{1}{8}$, Assam Oil $\frac{5}{8}$-$\frac{7}{8}$, Baku Ordinary 3s. 9d. to 4s. 3d., Preference 7s. 3d. to 7s. 9d., Bibi-Eybats $\frac{1}{2}$-$\frac{5}{8}$, Debentures 88-93, Californian Oilfields $6\frac{1}{2}$-$6\frac{3}{4}$, European Preference $\frac{3}{16}$-$\frac{5}{16}$, Debentures 87-91, Russian Petroleum 13s. 6d. to 14s. 6d., Preference 14s. 6d. to 15s. 6d., Debentures 91-94, Schibaieff Ordinary 9s. 9d. to 10s. 3d., Preference $3\frac{5}{8}$-$3\frac{7}{8}$, Shell Transport 22s. 3d. to 22s. 9d., Preference 9-$9\frac{1}{2}$, Spies $\frac{13}{32}$-$\frac{15}{32}$, and since then the only change has been an advance of 1s. per share in Russian on Tuesday to 14s. 6d to 15s. 6d., and a little business in the Preference on Wednesday, which, however, had no effect on the quotation. To-day's prices are quoted on page 88.

PETROLEUM TAXATION IN FRANCE.

According to a paper laid before the French Parliament the tax on refining of petroleum during the first eight months of 1905 yielded a revenue of 1,904,000 francs, which is 736,000 francs below the Budget estimate. On the other hand, the Customs receipts from the import duties on petroleum oils shew certain changes in the petroleum trade in France. Crude mineral oils, for instance, shew a falling off in revenue by 6,642,000 francs, refined mineral oils an increase of 5,236,000 francs, and heavy oils an increase of 701,000 francs.

The deficiency in the crude oils is due to the fact that in the first months of 1903, on which the estimates were based, large quantities of crude oil were taken out of bond in order to escape paying the refining tax, which came into force on the 1st of April, 1903. This factor not being present in 1905, there was consequently a shortage in receipts against the estimates. Apart from this there is the fact that for some years the imports of crude oil into France have been declining, whilst those of refined oils have been increasing. This tendency became more actuated after the introduction of the refining tax. Nevertheless the imports of crude oils are still far above those of refined oils. For the first eight months of 1905 the respective quantities were 154,640 tons and 75,868 tons respectively.

The surplus in receipts from refined oils is the counter balance to the decline in receipts from crude oils. The refining tax which has cut down the protective difference in tariff in favour of the French refining industry, naturally favours the importation of refined oils. On the other hand, certain special petroleum spirits have to be obtained from abroad and their consumption grows steadily with the development of automobile traction.

Compared to the corresponding period of 1904, the receipts from the petroleum refining tax in the first eight months of 1905 shew a decrease of 289,000 francs, viz.: 1,904,000 francs against 2,193,000 francs. The receipts from the import duties shew the following differences against the corresponding period of 1904:—Crude oil, a decrease of 1,613,000 francs; refined oils, an increase of 3,725,000 francs. Both these variations are due to the causes mentioned above, mainly to the petroleum refining tax.

Heavy oils shew an increase against those of 1904 by 650,000 francs. These include lubricating oils and gas oils, the imports of both of which are continuously increasing.

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 1st February, 1906, as follows:—

There is no change in the position, makers prices being very firm at last week's rates as under, especially for forward delivery:—

IC	18¾ × 14	124 sheets	110 lbs.	13/4½ to 13/6 per box.
IC	19¼ × 14	120 ,,	110 ,,	13/4½ to 13/6 ,,
IC	20 × 10	225 ,,	156 ,,	18/7½ to 18/10½ ,,

F.o.b. Wales. Tin lining and iron hooping extra.

PRODUCTION OF CRUDE OIL IN CALIFORNIA FOR 1905.

Dr. C. T. Deane, the Secretary of the California Petroleum Miners' Association, forwards to the Review the following details of the production of petroleum in that State during 1905, as well as a number of interesting statistics regarding oil field operations during the twelve months. His report is as under:—

District.	1902.	1903.	1904.	1905.
Coalinga	500 750	2,138,058	5,114,000	8,869,000
Santa Maria and Lompoc	116,500	208,890	670,500	5,300,000
Kern River	8,872,115	16,342,100	17,500,000	14,000,000
Los Angeles	1,047,300	793,765	1,200,000	3,000,000
Sunset	144,200	353,100	400,000	400,000
Midway	50,000	29,200	910	5,000
McKittrick	639,500	1,353,500	1,875,925	720,000
Newhall and Ventura	626,540	683,500	663,100	500,000
Fullerton and Brea Canyon	1,195,015	1,427,700	147,500	1,750,000
Whittier and Puente	687,030	878,015	748,000	960,000
Summerland	94,550	131,000	120,000	75,000
Sargents	—	—	35,090	20,000
Halfmoon Bay	—	—	1,000	2,000
Arroyo Grande	—	—	—	5,000
Total	13,973,500	24,337,828	28,476,025	35,671,000

	Barrels.		Barrels.
Daily average for 1904	78,011	Daily average for 1902	38,286
Daily average for 1905	96,000	Daily average for 1903	66,679

Oil District.	Total Production for 1905.	Field Stocks, December 31st, 1904.	Shipments for 1905.	Field Stocks, December 31st, 1905.	Wells Producing.	Wells Drilling.	New Derricks
Kern River	14,000,000	10,500,000	9,500,000	15,000,000	680	6	5
Santa Maria and Lompoc	5,300,000	200,000	4,190.000	1,310,000	73	42	1
Los Angeles and Salt Lake	3,000,000	128,000	2,778,000	350,000	300	20	12
Coalinga	8,869,000	74,000	8,946,000	30,000	243	26	9
Fullerton and Brea Canyon	1,750,000	77,760	1,727,760	100,000	150	3	2
Puente and Whittier	960,000	138,200	938,200	160,000	94	8	6
Newhall	150,000	4,000	104,000	50,000	52	1	1
Ventura	350,000	60,000	350,000	60,000	246	2	2
Summerland	75,000	10,400	85,400	—	120	1	1
Sunset	400,000	250,000	300,000	350,000	38	3	4
Midway	70,000	5,000	—	75,000	21	3	3
McKittrick	720,000	120,000	720,000	120,000	90	2	1
Sargents	20,0000	9,800	29,800	—	5	2	0
Arroyo Grande	5,000	—	—	5,000	1	3	4
Halfmoon Bay	2,000	1,000	—	3,000	3	1	1
Total	35,671,000	11,578,160	29,636,160	17 613,000	2,116	123	52

Note.—Field Stocks include oil in receiving tanks awaiting shipment.

AMERICA'S FUTURE SOURCES OF PETROLEUM SUPPLY.

A CHAT WITH PROF. C. F. Z. CARACRISTI.

A representative of the Petroleum Review had the pleasure of having an interesting conversation the other day with Prof. C. F. Z. Caracristi, a gentleman well-known throughout American oil circles, with regard to the general conditions now prevailing in the American oil fields, and the outlook for the petroleum industry of America.

Prof. Caracristi, it should be mentioned, is at present staying in London, though *en route* for Sicily, where he is to investigate the economic conditions of the sulphur supply. His present journey, however, has been undertaken as much for rest as anything else, ere a tour is made to other parts of the world.

Prof. Caracristi has made a life-long study of the American oil industry, and since the bringing in of the Lucas well, he has been very intimately associated with the various fields. His views, therefore, are of great weight, being focussed as they are in the light of experience

The conversation first turned upon the present conditions in the various American producing fields, and Prof. Caracristi was not slow to admit that the future of the now recognised producing regions was far from bright. He pointed out that whether they took the Pennsylvanian or Texas-Louisiana regions, the production was on the wane, the most alarming fact being that the high-grade fields were most certainly "giving out," and no territories yielding similer grades of oil were taking their place. That was to-day a matter which he knew was causing many prominent oil men the greatest anxiety.

The heavier oil-producing districts of Texas-Louisiana, too, were constantly reducing their output, and that in spite of increased activity. A great demand had now been created for liquid fuel, so much so that, strange as it appears, Texas imports quite large quantities of Californian oil to meet demands in the South-western part of the State. Prof. Caracristi believes that 41,000,000 barrels of crude oil could be annually used upon the various railroad systems entering Texas and Louisiana. The Southern Pacific railroad alone last year used 16,000,000 barrels.

It was claimed, mentioned Prof. Caracristi, that approximately 35,000,000 barrels were produced last year in the Texas-Louisiana regions, but he was convinced that the production was much less, and that the statistics had been padded in order to "boom" the fields. He found that in one case the United States Geological Survey reported a certain production of 117,000,000 barrels, whereas the pipe line certificates, the railroad way bills, and the stocks above ground together did not exceed 97,000,000 barrels. Therefore it was quite easy to make a mistake in regard to figures of production. The present tendency was for the small producer to exaggerate the figures of his production, and for the large firm to act *vice versa.*

With the decrease—the constant decrease—of the output of the various American fields on the one hand, and the continuously increasing demand for oil products, it became imperative that if that country's petroleum industry was to continue to prosper, new producing regions would have in the near future to be opened up. Many localities had been pointed to as being very likely, but in the opinion of Prof. Caracristi there were two fields which were destined to play a very important part in America's petroleum industry in the future. These fields were situated at in Ecuador and Columbia.

He had lately re-examined the regions, and although as yet they had not been exploited, there was no doubt that they contained very rich petroleum areas. The one thing which more than any other had prevented development in those new fields was the instability of the Government. Both of the fields were of the greatest importance, especially from a liquid fuel point of view, and their nearness to the Isthmus of Panama, and they would certainly be developed whenever capital was willing to take an abnormal risk. But for the present the capitalistic classes hesitated to make an investment in countries where the governments changed every six months. Among the other fields that were bound to receive greater attention as time went on, were Jennings and Anse Le Bute, but he felt certain that so far the Canadian oil region had scarcely been defined, and so in time more would be heard of the Canadian industry.

As shewing to what an extent the transport of oil by pipe line was carried on in the United States, Prof. Caracristi mentioned that there were now about 40,000 miles of oil pipe in the various producing centres. An effort was now to be made to bring all these lines into the Inter-State Commerce clauses, so that they would be common carriers, and thus the movement of oil to to the seaboard would be greatly facilitated.

"Yes," said Prof. Caracristi in reply to our representative, "the great opposition which the Standard Oil Co. has recently met with in America has had a most detrimental effect upon the country's petroleum industry, and the fact that prices are now lower than they should be can be traced to that one source. One wonders where the American petroleum industry would have been had it not been for the great organisation of the Standard Oil Co. They find markets for the oil of the small producers, they pay a fair price for the crude product, and they offer every facility for development. Personally, I am convinced that this opposition, which is simply a wave of political antagonism, is doing the greatest possible harm to the industry, for it has its aim in depriving business people of the right to engage in purely legitimate enterprises.

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Far Eastern Benzine for America.—The current issue of the *Oil City Derrick* states that, encouraged by their success in the shipment of two tank steamers with benzine cargoes to America last summer, the refiners in the East Indies have just landed another vessel from Singapore with 1,000,000 gallons of benzine for New York, and a little larger quantity for Philadelphia.

TANK STEAMER CHARTERS DURING 1905.

The following list of Tank Steamer Charters, made in the United Kingdom during the past year, and compiled by Messrs. Henry Funck and Co., Billiter Street, London, E.C., will be of value to our readers. Owing to the length of the list, the Charters made during the last six months of the year have been held over until our next issue.

	TONS CAP.	RATE PER TON.	PORTS OF SHIPMENT AND DESTINATION.	NUMBER OF VOYAGES.	CARGO.
Jan.	6000	10/6	United States—United Kingdom, or Continent (Ostende-Bremerhafen)	1	Refined and/or Gas Oil.
	2900	12/- 14/- 14/9	United States—United Kingdom, or Continent ,, Copenhagen ,, Stockholm	1	Refined.
	4500	13/-	,, La Pallice	1	,,
	3500	12/6	Batoum—Steilene	1	,,
	3200	10/6	,, or Novorossick—London, or Hull, or Cardiff	1	,,
	6000	10/6	United States—United Kingdom, or Continent (Ostende-Bremerhafen)	1	,,
Feb.	5100	10/6	United States—United Kingdom, or Continent	1	,,
	3900	16/- 1 port 16/6 2 ports	West Indies—United Kingdom	1	Molasses.
	6200	10/6	United States—United Kingdom or Continent (Ostende-Hamburg)	1	Refined and/or Gas Oil.
	5000	10/3 10/9 11/6 2 ports	Batoum, or Novorossick—Rotterdam ,, ,, Hamburg ,, ,, Rotterdam and Hamburg	1	Refined.
	6000	10/6	United States—United Kingdom, or Continent (Ostende-Hamburg)	1	,,
	3100	10/-	Fiume—London	1	Gas Oil.
	6000	10/3 10/9	United States—United Kingdom, or Continent (Ostende-Bremerhafen) United States—Hamburg	1	Refined and/or Gas Oil.
	5100	10/4½	Batoum—United Kingdom (including Manchester, excluding Cardiff and Hull)	1	Refined.
	5000	10/6	United States—United Kingdom, or Continent (Ostende-Hamburg	1	,,
	6000	10/3 10/6	United States—Rotterdam or Amsterdam ,, Hamburg	1	Refined and/or Gas Oil.
	2400	10/-	Thames Haven—New York or Philadelphia	1	Spirit.
Mar.	3800	16/3 12/-	Port Arthur (Texas)—Antwerp Batoum ,,	1	Gas Oil and/or Lubricating Oil. Pale Lubricating Oil.
	4700	16/- 1 port 17/- 2 ports	Port Arthur (Texas)—Liverpool and/or Barrow	1	Fuel Oil or Gas Oil.
	6000	10/3 10/6	United States—United Kingdom, or Continent (Ostende-Bremerhafen ,, Hamburg)	1	Refined and/or Gas Oil and/or Lubricating Oil.
	6200	10/3 10/6	,, United Kingdom, or Continent (Ostende-Bremerhafen) ,, Hamburg	1	Refined and/or Gas Oil.
	5100	10/3 10/6 11/6 12/6	,, United Kingdom, or Continent (Ostende-Bremerhafen) ,, Hamburg ,, Copenhagen ,, Stockholm	1	,, ,,
	5000	11/- 1 port 12/- 2 ports	Novorossick—Rotterdam and/or Hamburg	1	Refined.
	5000	30/-	United States—Bombay	1	,,
	3200	12/6 13/6 15/-	,, Lisbon ,, Copenhagen ,, Stockholm	1	,,
	3500	13/6	New York or Philadelphia—Port de Bouc, or Cette, or Marseilles	1	,,
	5200	10/3 10/6 11/6 12/6	United States—United Kingdom, or Continent (Ostende-Bremerhafen) ,, Hamburg ,, Copenhagen ,, Stockholm	1	,,
	4600	10/6 30/-	,, United Kingdom, or Continent (including Hamburg) ,, Bombay	1	,,
	2850	16/-	Braila—Rouen	1	Spirit.
April	3500	12/-	Batoum—Antwerp	1	Pale Lubricating Oil.
	5400	16/- 1 port 17/- 2 ports	Port Arthur (Texas)—United Kingdom	1	Refined and/or Gas and/or Fuel Oil.
	4300	25/-	Batoum, or Novorossisk—Bombay, or Calcutta	1	Refined.
	2200	14/- 1 port 15/- 2 ports	,, Havre, or Rouen, or Calais	1	Pale Lubricating Oil.
	3500	13/6 14/- 11/-	Braili—London ,, French Atlantic Port (including Rouen ,, Cette	1	Refined and/or Distillate.
	3250	14/6 1 port 15/6 2 ports	Kustendje—Bordeaux River (Furt, Blaye, St. Loubes) or Havre, or Rouen	1	Spirit.
	4250	10/3 10/6 11/6 12/6	United States—United Kingdom, or Continent (Ostende-Bremerhafen United States—Hamburg ,, Christiania ,, Stockholm	1	Refined.
	60/6500	10/3	Kustendje—London	1	Refined and/or Distillate.

TANK STEAMER CHARTERS—*Continued.*

	TONS CAP.	RATE PER TON.	PORTS OF SHIPMENTS AND DESTINATION.	NUMBER OF VOYAGES.	CARGO.
MAY	5400	10/3	United States—United Kingdom, or Continent (Ostende-Bremerhafen)	3	Refined and/or Gas Oil.
		10/6	,, Hamburg		
	5100	10/3	,, United Kingdom, or Continent (Ostende-Hamburg)	1	,, ,,
		11/6	,, Copenhagen		
		12/6	,, Stockholm		
	3200	£2100 lump sum	Sulina—Rouen	1	Refined.
	3200	£1000 ,, ,,	Hamburg—Rouen	1	,,
	5200	10/3	Batoum, or Novorrossisk—United Kingdom	1	,,
	6200	10/3	United States—United Kingdom, or Continent (Ostende-Hamburg, both inclusive)	1	Refined and/or Gas Oil.
	4300	10/6 1 port 11/3 2 ports	Black Sea—Rotterdam and/or Hamburg	1	Refined.
	3500	12/3	Batoum—Antwerp	1	,,
	6000	10/-	United States—United Kingdom, or Continent (Ostende-Bremerhafen)	1	,,
		10/3	,, Hamburg		
		10/3	,, Christiania		
		12/3	,, Stockholm		
		14/-	,, West Coast Italy		
		15/-	,, Venice		
	3800	15/3	Philadelphia—Cette	1	Crude.
	4800	10/3	United States—United Kingdom, or Continent (Ostende-Bremerhafen)	1	Refined.
		10/6	,, Hamburg		
		11/9	,, Christiania		
		12/9	,, Stockholm		
		14/-	,, West Coast Italy		
		15/6	,, Venice		
	3600	13/- 2 ports	Philadelphia—La Pallice and Rouen	1	,,
	5200	10/3	Black Sea—United Kingdom	1	,,
	4600	12/6	Kustendje or Braila—France Atlantic Port (Rouen excluded)	3	Spirit.
		13/9	,, ,, Rouen		
JUNE	4600	10/3	United States—United Klngdom	1	Refined.
	5400	16/- 1 port 17/- 2 ports	Port Arthur (Texas)—United Kingdom	1	Fuel Oil.
	3000	17/-	,, ,, ,,	1	Gas Oil.
	6000	10/-	United States—United Kingdom (excluding Manchester) or Continent (Ostende-Bremerhafen)	1	Refined.
		10/3	,, Hamburg		
	3600	13/6 2 ports	Philadelphia—La Pallice and Rouen	1	,,
	3800	10/9 1 port 11/9 2 ports	Batoum, or Novorossisk—Antwerp, or Hamburg, or London	1	Lubricating Oil.
	3500	17/-	Port Arthur (Texas)—Cette, or Rouen	1	?
	4600	14/-	Philadelphia—Savona	1	Refined.
	2200	13/-	Batoum, or Novorossisk—United Kingdom, or Dunkerque, or Antwerp	1	Pale Lubricating Oil.
	5000	10/3	United States—United Kingdom, or Continent (Ostende-Hamburg inclusive	1	Refined.
		13/6 1 port 14/- 2 ports	,, West Coast Italy, or Sicily		
		14/9	,, Venice		
	3200	14/-	,, West Coast Italy, or Sicily	1	,,
		15/6	,, Venice		
	4600	14/-	,, West Coast Italy, or Sicily	1	,,
		15/6	,, Venice		
	6000	10/3	,, United Kingdom, or Continent (Ostende-Bremerhafen)	2	,,
		10/6	,, Hamburg		
		11/6	,, Copenhagen		
		14/- 1 port 14/6 2 ports	,, West Coast Italy } Options on first voyage		
		15/-	,, Venice		
	3500	Private terms	Kustendje—Rouen	1	Spirit and/or Distillate.
	3250	12/9	United States—Lisbon	1	Refined.
		13/9 1 or 2 ports	,, ,, and/or Oporto		

(To be concluded.)

THE PETROLEUM TRADE OF REGENSBURG.

The town of Regensburg, on the Danube, in Southern Germany, is of great significance to the petroleum trade as a port of entry of Roumanian petroleum into Germany by way of the Danube. The people of Regensburg are fully alive to the importance of the question, and have for some time been urging the Bavarian Government to improve the navigation of the Danube, and to establish a port at Regensburg, where steamers could winter, and also facilities for transhipment of goods.

The Regensburg Chamber of Commerce, who are taking a lively interest in the question, in a recent report, point to the urgency of the above measures. The imports of Roumanian petroleum products into Regensburg, in 1905 amounted to 16,000 tons, and the quantity will soon be exceeded to such an extent that a second petroleum wharf will become indispensable. At the present time there are at Regensburg storage tanks of a capacity of 20,000 tons. There is also a fair prospect for establishing and developing a petroleum refining industry in this district. So far the Government has done nothing for the development of this trade route. For the fifth time a petition for this purpose has now been laid before the Bavarian Parliament, and it is expected that this time the petition will be granted, particularly as the Regensburg Chamber have offered to provide, free of charge, the land required for the establishment of two new wharves.

The American Oil Market.

New York, Week ended Jan. 20th.

The reports from the producing regions have been somewhat meagre during the past week, and the results shewn have been very unsatisfactory. The number of completions reported have been smaller, and very few good wells have been among them; they apparently becoming rare occurrences. The producers reported were for the most part small pumpers of from 2 to 10 barrels, while the percentage of dry holes has shewn no improvement. The failure to find strictly new producing territory, capable of furnishing high grade crude, causes operators to take an interest in new strikes inside of the old defined limits, if there is room for a pool. For more than two years the discovery of small pools has been the only thing to encourage a continuance of operations in nearly every producing district. Under the conditions which have existed in the producing regions for some time, the statements of the pipe lines, shewing an increase in production last month, came somewhat as a surprise, but the monthly report, as a whole, was very bullish, says the *Oil, Paint and Drug Reporter*, and the further reduction in stocks of over half-a-million barrels is cited as a strong reason why the price of the product should advance, and indeed considerable disappointment has been expressed at the failure of the market to respond to the stronger statistical situation. The stock of Pennsylvania crude is now only 3,500,000 barrels, and that of Lima crude only 12,600,000 barrels, or 16,100,000 barrels altogether. At the rate of decrease of the past few months the supplies will become exhausted in about two years, and some contend that then the quality of the refined products will shew deterioration. That, however, is the contention of the producers, and an argument for better prices for their product. There have been no new features reported from the mid-continent fields or from Texas.

Refined and Products.—The demand for refined for export has again been light, and the engagements barely exceeding 100,000 barrels, all for shipment in bulk. This is believed to be due to the fact that comparatively few tank vessels have been on this side, as no important changes have taken place in the conditions in the principal foreign markets. Reports from Russia have been more re-assuring, and it is said rapid progress is being made in re-building the burned plants, although few particulars have been received from Baku.

The price for barreled oil has remained steady at 7·60 for New York loading, and at 7·55c. for Philadelphia loading. The principal foreign markets are easier. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. od. @ 3s. od. to Continental ports, as to port and vessel.

Cases for export have been in good request, and sales of over 300,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in light request, and sales of about 5,000 barrels are reported. Pennsylvania crude is quoted at 7·60c. in barrels.

Crude naphtha continues steady. For export, sales of about 20,000 barrels have been reported.

CLOSING QUOTATIONS.

Crude.		Week ended Jan. 13. 1906.	Week ended Jan. 20. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk		4·70	4·70
Residuum, bbls for export		6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were :—

	Week ended Jan. 20. 1905.	Week ended Jan. 20. 1906.
Tiona	1·57	1·68
Pennsylvania	1·42	1·58
North Lima	0·95	0·94
South Lima	0·90	0·89
Indiana	0·90	0·89
Canadian Oil :		
Petrolia	1·48	1.34

Refined—For Export.

		Week ended Jan. 13.	Week ended Jan. 20.
Cargo Lots for export	per gal.	7·60	7·60
In bulk		4·70	4·70
Philadelphia loading		7·55	7·55

Refined in Cases—110 Fire Test.

	Week ending Jan. 13.	Week ending Jan. 20.
5,000 to 10,000	10·35	10 35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended Jan. 13.	Week ended Jan. 20.
120 fire test, S.W.	per gal.	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ending Jan. 13.	Week ending Jan. 20.
Naphtha, crude, car. lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	17	17

Pennsylvania Oil Runs from Jan. 12th to Jan. 17th were :—Jan. 12th, 75,517; Jan. 13th and 14th, 75,016; Jan. 15th, 53,172; Jan. 16th, 63,238; Jan. 17th, 61,426. For the month of December, 2,324,476.

The Deliveries of Pennsylvania Oil for the same dates were :—76,043; 86,543; 90,935; 65,630; 73,327; For the month of December, 2,450,174.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended Jan. 19 and from Jan. 1, were as follows :—

	Week.	Year.	1905.
Refined, barrels and bulk	128,700	327,200	468,600
Refined, cases	320,000	1,334,000	260,000
Crude, barrels and bulk	—	59,200	74,400
Crude, cases	25,000	25,000	—
Naphtha, barrels	18,000	18 000	42,000
Residuum, barrels	32,000	32,000	18,000
Lubricating, barrels	3,100	3,100	3,100
Total, barrels cde. eq.	311,825	1,019,214	954,602

Clearances for the Week.

During the week ended Jan. 19th, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows :—

	Week.	Year.	1905.
Refined	2,674,540	16,548,840	25,145,442
Crude	7,700	7,700	113,453
Naphtha	929,500	1,026,950	240,538
Residuum	—	—	905,064

Export Statistics.

The total exports from the port of New York and from the United States have been :—

	Gallons.
From New York, week ended Jan. 19th	3,573,753
Total from New York, from Jan. 1, 1906	22,076,153
Same period last year	33,640,709
Decrease	11,564,556
From United States, week ended Jan. 19th	16,322,431
Total from United States, since Jan. 1, 1906	44,132,762
Same period last year	47,343,859
Decrease	3,211,197

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The "Review" Shipping List.

Feb. 1, 1906.

Specially Prepared for this Journal.

Note.—Except when otherwise stated the Vessels are Steamers.

(The following abbreviations are used in this table:—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Sables d'Olonne	Philadelphia	L. Jan. 22
ALCHYMIST	Barrow	Salzaete	L. Jan. 28
AMERICAN	Antwerp	New York	Off I. of W., Jan. 26
APPALACHEE	Shanghai	SanFrancisco	Arr. Dec. 15
APSCHERON	Antwerp and Rouen	Batoum	Arr. Jan. 16
ARAL	Tyne	Philadelphia	L. Jan. 17
ARAS	Newport	Batoum	L. Const'iple, Jan. 24
ARGYLL	Port Harford	SanFrancisco	Arr. Jan. 18
ASTRAKHAN	Tyne	Philadelphia	L. Jan. 14
AUGUST KORFF	Hamburg	New York	P Butt of Lewis, Jan. 22
AUREOLE	Barry	New York	Arr. Jan. 24
BAKU STANDARD	Alexandria	Kustendje	L. Jan. 24
BALAKANI	Manchester	Port Arthur (Texas)	Arr. Jan. 21
BATOUM	Philadelphia	London	P. Del. Break., Jan. 16
BAYONNE	Venice	New York	L. Messina, Jan. 21
BEACON LIGHT	Philadelphia	Lisbon	L. Del. Break., Jan. 17
BEME	Bombay	Rangoon	L. Jan. 6
BLOOMFIELD	Tyne	New York	L. Jan. 24
BORJOM	Batoum	Odessa	L. Sept. 18
BRILLIANT	Stettin	New York	L. Tyne, Jan. 17
BROADMAYNE	Philadelphia	Liverpool	Arr. Jan. 31
BULLMOUTH	Singapore	Palembang	Arr. Jan. 29
BULYSSES	Amsterdam	Kustendje	P. Sagres, Jan. 30
BURGERMEISTER PETERSEN	London	Philadelphia	P. Dungeness, Jan. 17
CADAGUA	—	—	In port, Bilbao, Dec. 26
CALCUTTA (Br. bq.)	Newcastle (N.S.W).	SanFrancisco	L. Dec. 4
CARDIUM	Singapore	—	L. Jan. 23
CAUCASIAN	London	Philadelphia	Arr. Jan. 31
CHARLOIS	Antwerp	New York	Arr. Jan. 28
CHESAPEAKE	Manchester	Philadelphia	P. Fastnet, Jan. 29
CHESTER	Philadelphia	Antwerp	P. Del. Break, Jan. 19
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Yokohama	Kobe	Arr. Jan. 30
COL. E. L. DRAKE	New York	Galveston	L. Oct. 25
COWRIE	Cardiff	Singapore	P. Sagres, Jan. 30
CYMBELINE	Port Talbot	Philadelphia	Arr. Jan. 24
CZAR NICOLAI II.	Antwerp	Hamburg	Arr. Feb. 1
DAGHESTAN	Philadelphia	Dunkirk	At Dunkirk, Jan. 30
DAKOTAH	SanFrancisco	Shanghai & Canton	L. Shanghai, Dec. 25
DELAWARE	Cardiff	New York	Arr. Jan. 26
DEUTSCHLAND	Hamburg	New York	Arr. Jan. 25
DIAMANT	Philadelphia	Savona	P. Del. Break., Jan. 8
ELAX	Calcutta		L. Jan. 26
ELISE MARIE	London	New York	Arr. Jan. 29
ENERGIE	Philadelphia	Copenhagen	P. Butt of Lewis, Jan. 30
ERIVAN	Swansea	Port Arthur (Texas)	P. Lundy Is., Jan. 13
EUPLECTELA	Philadelphia	Dover	P. Del. Break., Jan. 16
EXCELSIOR	Port Talbot	New York	P. Brow Head, Jan. 21
EZIO	—	—	Coasting Peru
FRANCE MARIE	Marcus Hook	Barcelona	Arr. Dec. 6
GEESTEMUNDE	Philadelphia	Christiania	L. Jan. 25
GENESSE	Liverpool	Philadelphia	Arr. Jan. 21
GEORGIAN PRINCE	Tyne	New York	L. Jan. 30
GOLDMOUTH	Soesoe	—	L. Dec. 21
GRAF STROGANOF	Cronstadt	Odessa	In Tyne, Jan. 10
GUT HEIL	Pillau	Havana	Arr. Jan. 19
HAINAUT (Dch. shp.)	Beyrout	Smyrna	Arr. Jan. 25
HARRY WADSWORTH	Middlesbro'	Port Arthur (Texas)	P. Dungeness, Dec. 31
HELIOS	Fiume	Odessa	L. Jan. 6
HOTHAM NEWTON	Middlesboro'	New York	P. Scilly, Jan. 31
HOUSATONIC	Bombay	Newcastle (N.S.W.)	Arr. Jan. 16
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Piræus	Kertch	L. Constanti'ple, Jan. 23
J. B. AUG. KESSLER	Philadelphia	Galveston	L. Jan. 20
JAMES BRAND	Tyne	Port Arthur (Texas)	L. Jan. 16
KURA	Trieste	Belfast	P. Sagres, Jan. 27
LA CAMPINE	Antwerp	New York	P. Lizard, Jan. 19
LA FLANDRE	Philadelphia	Ghent	P. Del. Break, Jan. 14
LA HESBAYE	Antwerp	Philadelphia	At New York, Jan. 7
LA MADALEINE	Cardiff	Marseilles	Arr. Jan. 16
LA VIGUESA	Marcus Hook	Vigo	Arr. Nov. 6
LACKAWANNA	New York	London	Arr. Jan. 31
LE COQ	Cette	Port de Bouc	L. Jan. 27
LOUTSCH	Barcelona	Novorossisk	L. Const'n'ple, Sept. 5
LUCERNA	Manchester	Philadelphia	L. Liverpool, Jan. 21
LUCIFER	Rouen	Newport	Arr. Dec. 1
LUCIGEN	Port Talbot	Philadelphia	Arr. Jan. 28
LUCILINE	Cette	Philadelphia	P. Gibraltar, Jan. 22
LUMEN	Bergen	Tyne	Arr. Jan. 12
LUX	Philadelphia	Rouen	P. Del. Break., Jan. 19
MAKKAVEI	Batoum	Odessa	L. Jan. 13
MANHATTAN	New Orleans	Bremen	L. Jan. 23
MANNHEIM	Tyne	New York	P. Dunnet Head Jan. 19
MARGARETHA	London	Cuba	At Newport, Jan. 29
MEXICAN PRINCE	Tyne	Cuba	P. Dungeness, Jan. 14
MIRA	Philadelphia	Havre	L. Jan. 25
MUREX	Bombay	—	L. Jan. 17
NARRAGANSETT	London	New York	Arr. Jan. 24
NERITE	Singapore	BalekPappan	Arr. Jan. 17
NEW YORK	Southampton	New York	P. Nautucket, Jan. 27
OCEAN	Amsterdam	New York	Arr. Jan. 29
ORANJE PRINCE	Tyne	Cuba	L. Jan. 28
ORIFLAMME	Marseilles	Philadelphia	Arr. Jan. 24
OSCEOLA	Tyne	New York	L. Jan. 23
OTTAWA	Marcus Hook	Tampico	L. Galveston, Jan. 17
OURAL	Tyne	Port Arthur (Texas)	Arr. Jan. 25
PALEMBANG	Pulo Samboe	Singapore	Arr. Dec. 18
PAULA	New York	Dantzig	L. Jan. 26
PECTAN	Galveston	Port Arthur (Texas)	Arr. Jan. 28
PENNOIL	Philadelphia	Rotterdam	Arr. Jan. 20
PERLAK	Samboe	Singapore	Arr. Dec. 27
PETROLEUM	—	Gibraltar	Arr. Dec. 18
PHOEBUS	Hamburg	New York	Arr. Jan. 25
PINNA	Philadelphia	—	L. Jan. 29
POTOMAC	Liverpool	Philadelphia	Arr. Jan. 26
PROMETHEUS	Clyde	Brisbane	Arr. Jan. 1
PRUDENTIA	Rouen	Port Talbot	Arr. Jan. 21
RION	Novorossisk	Hull	P. Beachy Head, Jan. 30
ROCK LIGHT	Port Arthur (Texas)	—	L. Jan. 26

Vessel.	From.	For.	Latest Date and Position.
ROSSIJA	Novorossisk	Hamburg ..	P. Gibraltar, Jan. 28
ROTTERDAM	Rotterdam ..	New York ..	Arr. Jan. 24
RUSSIAN PRINCE	Liverpool ..	Havana	Arr. Jan. 18
SALAHADJI	Newchang ..	Singapore ..	Arr. Dec. 18
SEMINOLE	Philadelphia	Calcutta	P. Perim. Jan. 22
SILVERLIP	Antwerp	Hamburg ..	Arr. Jan. 27
SINGU	Bombay	Rangoon ..	L. Dec. 31
SNOWFLAKE	Penarth	Philadelphia	P. Barry Island, Jan. 20
SOPHIE	Batoum	Trieste	L. Const'ple, Jan. 26
SPONDILUS	Blexen	Cardiff	Arr. Jan. 31
STANDARD	Hamburg ..	Philadelphia	Arr. Jan. 29
STROMBUS	Singapore ..	—	L. Jan. 14
SURAM	Batoum	Hull	L. Const'ple, Jan. 19
SUWANEE	Philadelphia	Barrow and Belfast	At Barrow, Jan. 30
SVIET	Alexandria ..	Odessa	Arr. Dec. 17
TELENA	Cardiff	Singapore ..	L. Soesoe, Jan. 29
TEREK	Batoum	Manchester	Arr Jan. 30
TIFLIS	Tyne	Philadelphia	L. Jan. 25
TIOGA	Batoum	Liverpool ..	Arr. Nov. 25
TONAWANDA	Manchester	New York ..	Arr. Jan. 26
TROCAS	Singapore ..	—	L. Jan. 18
TURBO	London	Port Arthur (Texas)	Arr. Jan. 28
TUSCARORA	Calcutta	Boston	At Boston, Jan. 27
TWINGONE	Madras	Rangoon	L. Jan. 6
VEDRA	Algiers	—	P. Gibraltar, Jan. 28
VILLE DE DIEPPE	Dieppe	Philadelphia	Arr. Jan. 9
VILLE DE DOUAI	Calais	Dunkirk	L. Jan. 29
VOLUTE	BalekPappan	Hong Kong	Arr. Jan. 25
WEEHAWKEN	London	Sumatra	P. Perim, Jan. 22
WILLKOMMEN ..	Bremen	New York ..	L. Tyne, Jan. 24
WINNEBAGO (Late Kinsman)	Shanghai ..	Bombay	Arr. Jan. 26

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

February 2nd, 1906.

The price of refined petroleum has again been reduced this week, the importers' prices now being for Russian 5⅜d.; American, 6¼d.; Water White, 7¾d., Roumanian 5⅜d.

LUBRICATING OILS

are unchanged as follows:—

American pale, £7 5s. to £8 15s.
American dark cylinder, from £7 10s.
American filtered cylinder, from £10 12s. 6d.
Shellene, £5.

TURPENTINE.

American turpentine is quoted lower than last week, for Spot and to the end of May 47s. 6d. to 47s. 9d., but lower prices are quoted for later deliveries.

LIVERPOOL OIL MARKET

February 1st.

Refined oils are very quiet, but sellers now quote 6¾d. for Russian and 7½d. to 8¾d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, February 1st.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, February 1st.

Standard White is quoted at 7·55.

RUSSIA.

Baku, January 29th.

The position of the petroleum trade is improving. There are more buyers, but few sellers. Crude is now quoted from 20 to 20½ copecs, and for opening of navigation 25 copecs. Residuals are 23 copecs, futures in railway waggons 25 copecs. It is expected that all prices will advance. The export by the Caspian Sea to Petrovsk is 60,000 poods per day, and about 35,000 by rail. Messrs. Nagaieff and Co. have sold 200,000 poods of crude at 21½ copecs.

BELGIUM.

Antwerp, January 26th.

The petroleum market is unchanged. Price of Standard White, spot, 19½ francs per 100 kilos; February, 19¾ francs; February, 20 francs.

ROUMANIA.

January 30th.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs. ...	3·35-3·40
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery ...	3·00- —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural...	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octroi tax of 12 fcs. per 100 kilos.

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
„ sp. gr. 0·720-0·725	8·00- 9·00
„ sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

Bombay, January 6th.

There has been no further decline in prices of Burma oils since our last report.

American, "Snowflake," 150 deg.	Rs.	6	0	2
„ Chester, 125 deg.		4	8	2
„ Monkey Brand, 125 deg.		4	2	2
Russian, "Anchor," 125 deg.		4	14	6
„ "White Camelia" brand, 125 deg. ..		4	0	2
„ "Rising Sun," bulk, in local made tins ..		3	14	0
„ "Elephant" brand, in local made tins ..		3	10	0
„ Bulk, in Bombay Bazaar, 125 deg. per 10 gallons..		3	3	0
Borneo oil in bulk		2	14	6
Burma Oil, in bulk, per 8 imperial gallons		2	11	0

◆

The Russian Share Market is very active, and there is much dealing at better prices in shares. Nobels and Mantascheff's have had a succession of jumps until their present price was reached, while Baku Naphtha Company's shares have been changing hands at from 438 to 445 roubles, these standing a few days ago at 390 roubles.

Batoum Export Trade.—From January 20th to the 27th there were shipped from Batoum to Europe 83,000 poods of kerosene against 389,000 poods for the corresponding period last year, while for the same period were shipped 9,000 poods to the East against 555,000 poods for the similar period a year ago. From January 14th to the 27th there were exported to Europe 842,000 poods of kerosene as against 901,000 last year, and to the East 298,000 poods as compared with 1,443,000 poods a year ago.

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IMPORTS of PETROLEUM into UNITED KINGDOM

FOR THE WEEK ENDED JANUARY 30th, 1906.

Specially prepared for
this Journal by . . .
the Custom House.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Jan. 24	London	Anglo-American Oil Co	Albatross	200 brls.	Lub.	8,000	Hamburg
,, 25	,,	,,	Minnehaha	3179 brls.	,,	127,160	New York
,, 25	,,	,,	,,	150 bls.	Min. Colz.	6,000	,,
,, 26	,,	Mordaunt Bros.	,,	154 brls.	Lub.	6,200	,,
,, 26	,,	,,	Minnesota	500 brls.	,,	20,500	Philadelphia
,, 26	,,	,,	Murillo	200 brls.	,,	8,000	Trieste
,, 26	,,	Worthington and Boler	Gordon Castle	175 brls.	,,	7,000	Philadelphia
,, 26	,,	J. W. Baker	Olivia	50 brls.	,,	2,500	Hamburg
,, 26	,,	London Oil Storage Co.	Viola	110 brls.	,,	1,920	,,
,, 26	,,	W. B. Dick and Co.	,,	200 brls.	,,	8,750	,,
,, 26	,,	R. Park and Co.	Corea	20 drums	,,	200	Boulogne
,, 27	,,	H. Hill and Sons	Murillo	250 brls.	,,	10,000	Trieste
,, 27	,,	H. Finkler and Co.	,,	50 brls.	,,	2,000	,,
,, 27	,,	Schenker and Co.	Ptarmigan	43 pks.	,,	460	Antwerp
,, 27	,,	Fielder, Hickman and Co.	Minnesota	500 brls.	,,	20,000	Philadelphia
,, 27	,,	A. Brown and Co.	,,	200 brls	,,	8,000	,,
,, 27	,,	W. Balchin	,,	125 brls.	,,	5,000	,,
,, 27	,,	Penn. and Delaware Oil Co.	Minnehaha	60 brls.	,,	2,400	New York
,, 27	,,	Worthington and Boler	,,	81 brls.	,,	3,300	,,
,, 29	,,	W. Balchin	Minnesota	473 brls.	,,	18,920	Philadelphia
,, 30	,,	A. Brown and Co.	Gordon Castle	125 brls.	,,	5,000	,,
,, 30	,,	Grindley and Co.	,,	60 brls	,,	2,400	,,
,, 30	,,	Anglo-American Oil Co.	Lackawanna	2000 cases	Pet. Spirit	16,000	New York
,, 30	,,	,,	,,	Bulk	,,	635,010	,,
,, 30	,,	T. H. Lee	Granton	41 brls	Lub.	2,850	Hamburg
,, 30	,,	Mocbius and Son	,,	50 brls.	,,	2,000	,,
,, 30	,,	G. W. Sheldon and Co.	Ptarmigan	7 brls.	,,	310	Antwerp
,, 24	Liverpool	Pickfords, Ltd.	Gothland	12 pks.	Lub, Gr.	410	Hamburg
,, 24	,,	Meade-King, Robinson and Co.	Cyclone	252 brls.	M. Lub.	10,080	,,
,, 24	,,	Livrepool Storage Co.	Armenian	1360 brls. 80 ½-brls.	,,	56,000	New York
,, 25	,,	A. Hopps and Sons	Haverford	375 brls	,,	15,000	Philadelphia
,, 25	,,	,,	,,	126 brls.	Min. Colz.	5,040	,,
,, 26	,,	Meade-King, Robinson and Co.	,,	855 brls.	M. Lub.	34,200	,,
,, 26	,,	Midland Railway Co.	,,	22 brls.	,,	790	,,
,, 26	,,	Worthington and Boler	,,	185 brls.	,,	7,400	,,
,, 26	,,	Crew, Levick Co.	,,	1727 brls	,,	71,670	,,
,, 26	,,	G. B. Taylor	Armenian	1740 brls.	,,	69,600	New York
,, 27	,,	Liverpool Storage Co.	Gothland	4 brls.	,,	160	Hamburg
,, 27	,,	Meade-King, Robinson and Co.	Haverford	700 brls	,,	28,000	Philadelphia
,, 27	,,	,,	,,	60 brls	,,	2,400	,,
,, 27	,,	Co-operative Society	Indore	300 brls	,,	12,000	Baltimore
,, 29	,,	W. Gibson and Sons	New Pioneer	7 brls	,,	270	Rouen
,, 29	,,	G. B. Taylor	Devonian	50 brls.	Lump	2,050	Boston
,, 29	,,	Liverpool Storage Co.	Bovic	2205 brls.	M.Lub.	88,200	New York
,, 29	,,	,,	,,	246 pks.	,,	10,240	,,
,, 29	,,	Vacuum Oil Co.	,,	24 pks.	,,	480	,,
,, 29	,,	Pickford's Ltd.	Iceland	22 pks.	Lub. Gr.	630	Hamburg
,, 26	Barrow	J. Little and Co.	Alchymist	Bulk	Liquid Fuel	98,200	Amserdam
,, 26	Bristol	H. Pritchard and Co.	Kansas City	58 brls.	Lub.	2,420	New York
,, 26	,,	Spillers and Bakers	,,	10 brls.	,,	400	,,
,, 26	,,	W. Smith and Co.	,,	380 brls.	,,	15,200	,,

MIDLAND RY=CARRIAGE & WAGON CO., LTD.,

Midland Works,
BIRMINGHAM.

BUILDERS OF
OIL & OTHER
TANK WAGONS,
And Every Description
of Rolling Stock
WITH WOOD OR STEEL
UNDERFRAMES

Anglo-American Oil Co., Ltd.,

SOLE IMPORTERS

Finest American Lamp Oils

WHITE ROSE

. . and . .

ROYAL DAYLIGHT.

Pratt's Motor Spirit

PACKED IN SEALED TWO GALLON CANS.

Universally used by all leading Motor Manufacturers, Motorists, Railway and Motor Bus Companies.

IN USE AND FOR SALE EVERYWHERE.

QUALITY TELLS.

To Dealers only.

DATE.	PORT INTO WHICH IMPORTED.	CONSIGNEE.	VESSEL.	PACKAGES.	DESCRIPTION OF OIL.	NUMBER OF GALLONS.	PORT WHENCE.
Jan. 26	Bristol ..	W. Smith and Co. ..	Kansas City ..	200 brls.	Lamp ..	8,000	New York
,, 26	,, ..	H. R. James and Son	,, ..	325 brls.	Lub. ..	13,000	,,
,, 26	,, ..	,,	,, ..	665 brls.	M.Colza ..	26,600	,,
,, 26	,, ..	Collins and Co., Ltd.	,, ..	50 brls.	Lub. ..	2,000	,,
,, 26	,, ..	Pickford, Ltd.	City of Dresden	160 pks.	,, ..	750	Hamburg
,, 25	Goole ..	Goole Steamship Co.	Nidd ..	14 brls.	,, ..	700	Antwerp
,, 24	Hull ..	T. Wilson, Sons, and Co. ..	Otto ..	3 brls.	,, ..	120	,,
,, 24	,, ..	,,	Toronto ..	159 pks.	,, ..	4,800	New York
,, 25	,, ..	,,	,, ..	275 brls.	,, ..	11,000	,,
,, 25	,, ..	,,	Sultan ..	9 brls.	,, ..	360	Antwerp
,, 25	Manchester ..	Liverpool Storage Co...	Hillcraig ..	210 brls. 10 ½-brls.	M.Lub. ..	8,940	New York
25	,, ..	W. Hodgson and Co.	Pellworm ..	100 brls.	,, ..	4,300	Hamburg
,, 25	,, ..	Bramwell, Fern and Co.	Hillcraig ..	10 brls	,, ..	410	New York
,, 25	,, ..	G. B. Taylor..	,, ..	4787 brls.	,, ..	191,480	,,
,, 25	,, ..	J. T. Fletcher and Co.	Pandion ..	8 brls.	Lub. Gr. ..	320	Antwerp
,, 29	,, ..	Manchester Liners ..	Man. Corporation	75 brls.	M.Lub. ..	3,100	Philadelphia
,, 30	,, ..	G. B. Taylor ..	,, ,,	2270 brls.	,, ..	90,800	,,
,, 30	Swansea ..	Burgess and Co.	Llandaff City ..	50 brls.	,, ..	2,400	New York
,, 25	Dundee ..	D. Alexander and Sons	Sardinia ..	6 brls.	Lamp ..	240	Hamburg
,, 24	Glasgow ..	Anchor Line ..	Ethiopia..	1592 brls.	M.Lub. ..	64,580	New York
,, 25	,, ..	Burrell and Son	Bathori ..	400 brls.	Lub. ..	16,000	Trieste
,, 29	,, ..	Anchor Line ..	Furnessia ..	2157 brls.	,, ..	85,080	New York
,, 29	,, ..	Donaldson Bros.	Marine ..	300 brls.	, ..	12,680	Baltimore
,, 26	Grangemouth	W. G.Yooll and Co.	Staffa ..	50 brls.	Lamp ..	2,000	Hamburg
,, 24	Leith ..	,,	Corsica ..	50 brls.	,, ..	2,180	,,
,, 24	,, ..	J. Currie and Co. ..	Weimer ..	50 brls.	,, ..	2,180	,,
,, 24	,, ..	,,	,, ..	20 pks.	Lub. ..	340	,,
,, 25	,, ..	,,	Coblenz ..	18 pks.	,, ..	210	,,
,, 25	,, ..	Graham-Yooll and Co.	,, ..	100 brls.	Lamp ..	4,360	,,
,, 25	,, ..	,,	Breslau ..	50 brls.	,, ..	2,180	,,
,, 25	,, ..	Henderson and McIntosh..	Rada ..	1275 brls.	Lub. ..	51,000	Philadelphia
,, 25	,, ..	G. Gibson and Co. ..	Windsor..	40 brls.	,, ..	1,800	Calais
					NET TOTAL	2,074,630	

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO JANUARY 30th, 1906.

IN GALLONS.

[ALL RIGHTS RESERVED.]

COUNTRY.	ILLUMINATING.		LUBRICATING.		RESIDUALS.		GAS OIL. (Solar)		BENZINE.		FUEL OIL.		OTHER DESCRIPTIONS.		TOTALS.	
	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.
Austria ...	—	—	36,000	78,090	—	11,000	—	—	—	—	—	—	—	—	36,000	100,090
Belgium ...	—	240	2,270	42,040	—	11,000	—	—	—	1,620	—	—	—	406	2,270	44,306
Borneo ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Canada ...	—	—	—	—	—	10,000	—	—	—	—	—	—	—	—	—	10,000
Germany ...	13,140	650,920	42,900	203,370	—	—	—	—	—	2,320	—	—	—	4,980	56,040	871,590
Holland ...	—	—	—	—	—	—	—	—	—	773,600	98,200	98,200	—	6,120	98,200	877,920
Roumania ...	—	1 360,000	—	—	—	—	—	—	—	—	—	—	—	—	—	1,360,000
Russia ...	—	3,233,870	—	800	—	—	—	—	—	—	—	—	—	5,410	—	3,240,080
Sumatra, &c	—	—	—	—	—	—	—	—	—	930,000	—	—	—	—	—	930,000
U.S.A. ...	10,050	5,599,591	1,181,150	3,329,480	—	430,198	—	5,009,920	651,010	651,190	—	—	37,640	117,240	1,879,850	15,127,619
Other Countries	—	—	2,270	4,030	—	—	—	—	—	480	—	—	—	300	2,270	4,810
	23,190	10,844,621	1,264,590	3,657,810	—	462,198	—	5,009,920	651,010	2,359,210	98,200	98,200	37,640	134,456	2,074,630	22,566,415

Telegraphic Address:—"OLEINE."

Telephone Nos.:—249 & 254 LIVERPOOL.
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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XIV. *(New Series.)* FEBRUARY 10TH, 1906. No. 362.

Editorial Notes.

The Oil Port of Manchester.

The Manchester Ship Canal, contrary to many expressed opinions, is making marked progress as the inland waterway to the vast population of Lancashire and Yorkshire, and in many respects has already rivalled its older waterside city—Liverpool. At least, as a centre for the distribution of petroleum products she has long ago passed the Mersey port, and now ranks next to London itself in the quantity of oil which yearly finds its way to its numerous storage tanks. Last year, the port of Manchester received no less than 18,000,000 gallons of petroleum from various parts of the world, and thus to the extent of over 5,000,000 gallons surpassed the total imports to both Liverpool and Birkenhead. It is perhaps not generally known what an immense amount of storage has been constructed during recent years alongside the Manchester Ship Canal for the accommodation of petroleum. The total oil storages at or adjacent to the docks at Manchester can now almost find room for 80,000 tons, this quality being divided between the following companies:—The Consolidated Petroleum Co., 22,000 tons; the General Petroleum Co., 15,600 tons; the Anglo-American Oil Co., with eight tanks, 12,000 tons; the Homelight Oil Co., 8,000 tons; the Liverpool Storage Co., 10,000 tons; the Manchester Corporation, 4,000 tons; and the General Oil Storage Co., 8,000 tons, so that, in all, considerably over 20,000,000 gallons can be cared for at once in the tanks at Trafford Park. This in itself speaks volumes for the energy with which Manchester is going ahead as the centre of supply for oil in Lancashire and adjoining counties. The headway which has been made during the past five years in the transformation of the rural park at Trafford to the now busy hive of industry known as "Traffic Park" has to a great extent been brought about by Mr. Marshall Stevens, one of the leaders of the Manchester Ship Canal, who resigned his position as managing director to take charge of the development of Trafford Park. Certainly the great work already accomplished shews what really can be done with a sound undertaking in the hands of a man of breadth of view and business ability and capital.

The Roumanian Petroleum Export Trade in 1905.

According to the official figures which have just been published, the export trade in petroleum products of Roumania is in a most healthy condition. During the year the total export of petroleum amounted to 214,248 tons, against 160,442 tons in 1904 and 126,227 tons in 1903. Thus the exports for the past year shew the very substantial increase of 53,905 tons, or 33 per cent., whilst 1904 shewed an increase against 1903 of 27 per cent. The exports of the different classes of products in 1905, compared with those of 1904 and 1903, were as under (in tons):—

	1903.	1904.	1905.
Crude oil, gas oil, distillate, etc.	58,724	45,204	49,515
Illuminating oil	45,897	78,270	118,134
Benzine	21,606	36,969	46,699
Total	126,227	160,442	214,348

The above classification of the products exported shews that the greatest increase during the year has occurred in illuminating oil, namely, for by 39,866 tons the exports exceed those of 1904, while the foreign trade in benzine has increased by nearly 10,000 tons. Comparing 1905 with 1903, we find, on the one hand, that the export of illuminating oils has increased by 72,239 tons, and benzine by 25,091, whilst, on the other hand, the heavy oils have decreased by 9,209 tons.

A Year's Drilling in Texas.

Some very interesting figures have been published concerning the activity in drilling in Texas during the past twelve months, which go to shew to what an extent some of America's producing fields have proved disappointing to the operator. As a rule, we know that extensions of producing territory are only rarely met with nowadays, and so disappointing have results been, that many operators have almost given up hope of encountering virgin territory that can be profitably worked. In Texas last year almost 700 wells were drilled, while over 600 were abandoned as being either dry or unprofitable. In fact, at the end of the year there were only 600 wells producing oil throughout Texas, the largest number being situated in the region of Batson. Humble, it is true, has been the hunting ground of the driller for many months, but to-day, in spite of the extensive drilling that has taken place there since this time last year, only about 100 wells are yielding. We hear very little now of Spindle Top, yet this locality shews up very well, and, though the large gushers of former days are absent, a number of steady pumpers are keeping the production fairly stationary, and 80 wells are now being worked.

Galician Production in 1905.

It will no doubt come as a general surprise to find that the crude oil production of Galicia has, during the past year, suffered a decline, and the figures for the output for the twelve months of 1905 shew that when compared with those for 1904 the decreased production has reached 26,000 tons. This is the first time for seven years that the Galician petroleum industry has not made rapid strides forward with regard to its production. From a trifle over 200,000 tons in 1895 and 300,000 tons two years later, its petroleum fields have yearly given out ever increasing quantities, until in 1904 the total yield amounted to no less than 827,000 tons, or 100,000 tons in excess of the output during the preceding year. For 1905, however, the figures are behind those of the previous twelve months to the extent of 26,000 tons, while strangely enough, in spite of this decline, stocks have increased during the year by nearly 100,000 tons. This has been brought about by two chief causes, the one the unsatisfactory economic conditions prevailing at home which have minimised the consumption of illuminating oil, and the absence of a proper organisation for the marketing of the products abroad. With regard to the production, the decrease has occurred during the latter half of the year, and with the exception of the Tarnawa-Wielopole region the whole of the fields have shared in the decline, though the Boryslaw field's production has fallen even in greater proportion to that of any other territory. The detailed figures will be found on another page.

OPERATIONS OF ROUMANIAN REFINERIES IN NOVEMBER.

The output of various products by the Roumanian refineries in November, and stocks at the beginning and end of the month were as follows :—

	Stock on October 31st. Tons.	Output in November. Tons.	Stock on November 30th Tons.
Benzine	17,483	7,201	15,903
Refined Oil and Distillate ..	43,982	14,824	33,193
Lubricating Oils ..	9,382	1,617	5,484
Residuals	62,064	23,046	59,006
Total	132,911	46,688	113.586

The consumption of petroleum in Roumania in November was as follows :—

	Tons.
Benzine	42
Illuminating Oil	4,625
Lubricating Oil	361
Residuals	18,752
Total	23,820

The output of paraffin scale in November amounted to 6·7 tons, the home consumption was 26½ tons, and the stock on November 30th, 16·8 tons.

AN IMPORTANT AMENDMENT TO THE COMPANY LAWS OF RUSSIA.

A communication from St. Petersburg states that an Imperial Decree, amending the laws relating to commercial undertakings and public companies, has been issued, by which the following new taxes are created :—"Undertakings required by law to publish periodical reports of their transactions will in future pay a tax of from 3 to 14 per cent. of their net profit when the latter exceeds 3 per cent. of the share capital and varies between that amount and 20 per cent. This provision does not affect the trade capital tax, which is retained. In addition, a 10 per cent. tax is imposed on the net receipts when the latter amount to over 20 per cent. of the share capital. Directors and members of the board of management of all undertakings which are obliged to publish periodical reports must pay a tax of from 1 to 7 per cent. of any salary or bonuses which they may receive from any such undertaking. The maximum rate (7 per cent.) applies only to salaries amounting to at least 20,000 roubles yearly."

It certainly does seem a pity that at a time when the Russian petroleum companies are urging the Government to assist them in every way possible that a new decree should be drawn up which directly strikes at the profits of the whole of the concerns.

THE BENZINE REFINING TRADE OF GERMANY.

The Chamber of Commerce of Hanover was recently asked by the railway authorities for its opinion on the advisability of the reduction of freights for raw benzine from the Russo-German frontier to the consuming centres in Germany. The reply of the Chamber, a copy of which is embodied in the annual report of that body, affords an interesting view of the position of German benzine refineries.

The benzine business in Germany, the report points out, is practically monopolised by the Asiastic Petroleum Co. and its ally, the Shell Transport and Trading Co., inasmuch as these British concerns are buying up the larger part of Roumanian and Galician benzine, only a small quantity of which they put on the market. It is suggested that the only remedy for this state of affairs is for the Russian railways to allow transport of raw benzine in cisterns and to grant cheaper rates to Germany.

[The opinions expressed by the Hanover Chamber of Commerce have been keenly criticised, and their report is declared to be decidedly inaccurate.—*Ed.* P. R.]

PRODUCTION OF CRUDE OIL IN GALICIA IN DECEMBER, 1905.

Fields.	Stocks on Nov. 30th. Tons.	Production in Dec. Tons.	Stocks on Dec. 31st. Tons.
West Galicia—			
Potok	5,436	1,901	5,790
Rogi	15,503	1,195	14,261
Rowne	216	122	299
Tarnawa, Wielopole, and Zagorz	5,615	4,494	8,260
Krosno	13,010	2,788	13,801
Other Fields	10,601	2,824	10,407
East Galicia—			
Boryslaw & Tustanowice	498,705	41,809	403.318
Schodnica	33,914	4,666	33,549
Uryz	22,148	1,544	22,126
Mraznica	1,969	140	1,917
Other Fields	323	820	293
Total	507,440	62,303	514,021

The quantity of crude oil delivered by rail from Boryslaw in December amounted to 33,595 tons, and the quantity used as fuel at Boryslaw and Tustanowice was 1,600 tons.

LATEST FROM BORYSLAW.

The latest news from Boryslaw records the bringing in of a number of new producing wells. These include a well of the Boryslaw Syndicate with a yield of 4,050 tons daily; well No. 5 of Messrs. Lubomirska and Co., at Potok, 975 metres deep and yielding 150 tons daily. Other reports put the yield of the last-named well at a lower figure. The Galicia Co. has also two new producing wells—Nos. 4 and 8, yielding together 70 to 80 tons daily.

At Tustanowice, boring activity is on the increase. At present, there are 80 firms operating there, who have either been drilling for some time or are about to commence operations. The Karpathen Co. has already laid down five new boreholes. The Naphta-Industrie A.G. is about to start to drill near the "Mukden" plot by the village of Ponerle. The Galicia Co., who possess several plots in this locality, has started drilling their first well. A number of quite new firms have also appeared on the field, and it is expected that within a few weeks some 20 new boreholes will be started at Tustanowice.

THE ROUMANIAN PETROLEUM EXPORT TRADE IN 1905.

The Roumanian petroleum export trade, the details of which during the past year we are now able to publish, continues to expand at great speed, and though England no longer takes a large share in the trade, it is nevertheless growing into a most important branch of the country's commerce.

According to figures just announced, the total export trade of Roumania in petroleum and petroleum products in 1905 amounted to 214,348 tons, as against 160,442 tons during the preceding year, the increase being 53,906 tons, or an increase upon the trade of 1904 of 33 per cent.

The following table shews the exports of the various products to the importing countries for the past three years, and from the totals it will be noticed that, while there has been a great increase in the export of illuminating oil and benzine, the foreign trade in crude oil, etc., has not been up to the quantity it stood at two years ago. The figures are given in tons :—

Country.	Crude oil, distillate, gas oil, etc.			Illuminating oil.			Benzine.			Total.		
	1903.	1904.	1905.	1903.	1904.	1905.	1903.	1904.	1905.	1903.	1904.	1905.
Austria-Hungary..	19,334	18,987	18,686	21	68	13	1,357	3,052	541	20,712	22,107	19,240
Bulgaria	1,095	1,732	1,245	2,793	3,231	3,343	21	32	55	3,909	4,995	4,643
England	32,035	18,141	15,140	5,050	15,588	7,430	—	3,139	—	37,086	36,869	22,570
France	3,455	2,335	11,790	5,035	25,089	79,766	4,659	13,207	27,369	13,149	40,631	118,925
Germany	—	143	82	10,694	14,258	19,109	13,577	11,355	17,900	24,271	25,757	37,091
Holland	2,541	24	—	10,829	10,208	—	1,624	6,012	—	14,998	16,243	—
Italy	27	42	52	10,104	7,984	—	10	9	25	10,140	8,026	77
Norway	—	3,277	1,141	—	—	1,610	—	29	—	—	3,306	2,751
Turkey	188	477	747	1,026	1,617	6,851	27	6	62	1,241	2,100	7,660
Other countries ..	46	46	545	345	225	12	331	138	747	720	408	1,391
Total	58,724	45,204	49,515	45,897	78,270	118,134	21,606	36,969	46,699	126,227	160,442	214,348

The foregoing table shews the great change which has occurred in the distribution of the Roumanian petroleum exports in the different countries. The following table shews the percentage of the total exports taken up by the different countries during the last three years :—

	1903. Per cent.	1904. Per cent.	1905. Per cent.
France	10·5	25	55
Germany	19	16	17
England	30	23	10
Austria-Hungary	16·5	14	9
Holland	11·5	10	—
Italy	8	5	—
Turkey	1	1·5	3·5
Bulgaria	3	3	2·5
Other countries	0·5	2·5	3
Total	100	100	100

The great increase in the exports to France is directly due to the activity and enterprise of Messrs. Desmarais Frères, who trade in Roumania under the title of the Aquila Franco-Romana.

In the case of Austria-Hungary the exports remain practically stationary at about 26,000 tons per annum, and these consist of crude oil taken by the Hungarian refineries, who, by treaty, have the privilege of importing up to 20,000 tons of Roumanian crude oil per annum at the reduced duty of 13·6 kronen per ton, against the normal duty of 68 kronen.

The total exports were distributed among the different ports and land frontier stations as follows :—

	Crude, distillate and gas oil.			Illuminating oil.			Benzine.			Total.		
	1903.	1904.	1905.	1903.	1904.	1905.	1903.	1904.	1905.	1903.	1904.	1905.
Constantza ..	35,583	24,026	17,725	26,931	51,878	88,292	4,683	14,110	22,605	67,198	90,015	128,679
Braila	2,630	20	10,811	10,829	15,710	21,998	1,624	8,481	6,546	15,083	24,212	39,355
Guirgevo	548	505	465	7,998	9,184	5,690	8,317	8,443	11,553	16,860	18,133	17,708
Predeal	14,720	14,472	14,402	89	110	—	6,208	2,374	1,335	21,017	16,956	15,737
Verciorova ..	4,636	4,667	4,890	—	45	13	771	257	610	5,407	4,959	5,513
Cernavoda ..	—	979	926	41	1,312	2,092	3	16	834	44	2,308	3,852
Burdugeni ..	—	22	—	—	—	—	—	2,951	2,944	—	2,973	2,944
Other routes ..	607	513	596	9	31	49	—	337	272	1,618	886	360
Total	58,724	45,204	49,515	45,897	78,270	118,134	21,606	36,969	46,699	126,227	160,442	214,348

It will be observed that the largest part of the exports go by sea, *via* Constantza. In 1905 this represented 128,679 tons, or 63 per cent. of the total, shewing an increase of 38,664 tons, against the figures of 1904, and of 61,481 tons, against those of 1903. Next in importance is the port of Braila on the Danube, where there are the export installations of the Aurora Co., now in possession of the Credit Petrolifer. In 1905 the shipments from this went up to the very substantial figure of 39,355 tons, or 19 per cent. of the total exports. This is an increase of 15,143 tons against 1904 and 24,272 tons against 1903.

The usual official monthly statistics are not yet available for December, but we take from the *Moniteur du Petrole Roumain* the following figures of the production of some of the principal firms during the month as compared with November :—

	December.	November.
STEAUA ROMANA—		
Bustenari	10,401	10,683
Campina	6,117	5,915
Sarata	1,032	1,044
Moinesti-Solonti	374	368
Baicoi	23	7
Policiori	13	7
Total for Steaua Romana ..	17,960	18,024
BUSTENARI CO.	11,069	10,450
TELEGA OIL CO.	4,226	4,170
INTERNATIONAL CO.—		
Bustenari	2,365	2,270
Gura-Ocnitza	1,135	1,200
Total for International Co. ..	3,500	3,470

Apparatus for Separating Oil from Water and Other Impurities.

As we announced in the Petroleum Review a few weeks ago, a patent has recently been accepted for an invention for improvements in an apparatus for separating oil and the like from water and other impurities. The specifications were filed by Mr. Herbert J. Haddan, on behalf of Messrs. Emile Roth Le Gentil, of Douai (Nord), Jean Tachard, of 53, Rue Taitbout, Paris, and Vincent Alba and Louis Alba, of 19, Rue Fontaine, Paris, and it relates to an apparatus for recovering and collecting oil and the like which has been used for the lubrication of marine and other engines, so that the said oil can either be directly used again or treated in such a manner as to render it suitable for renewed use.

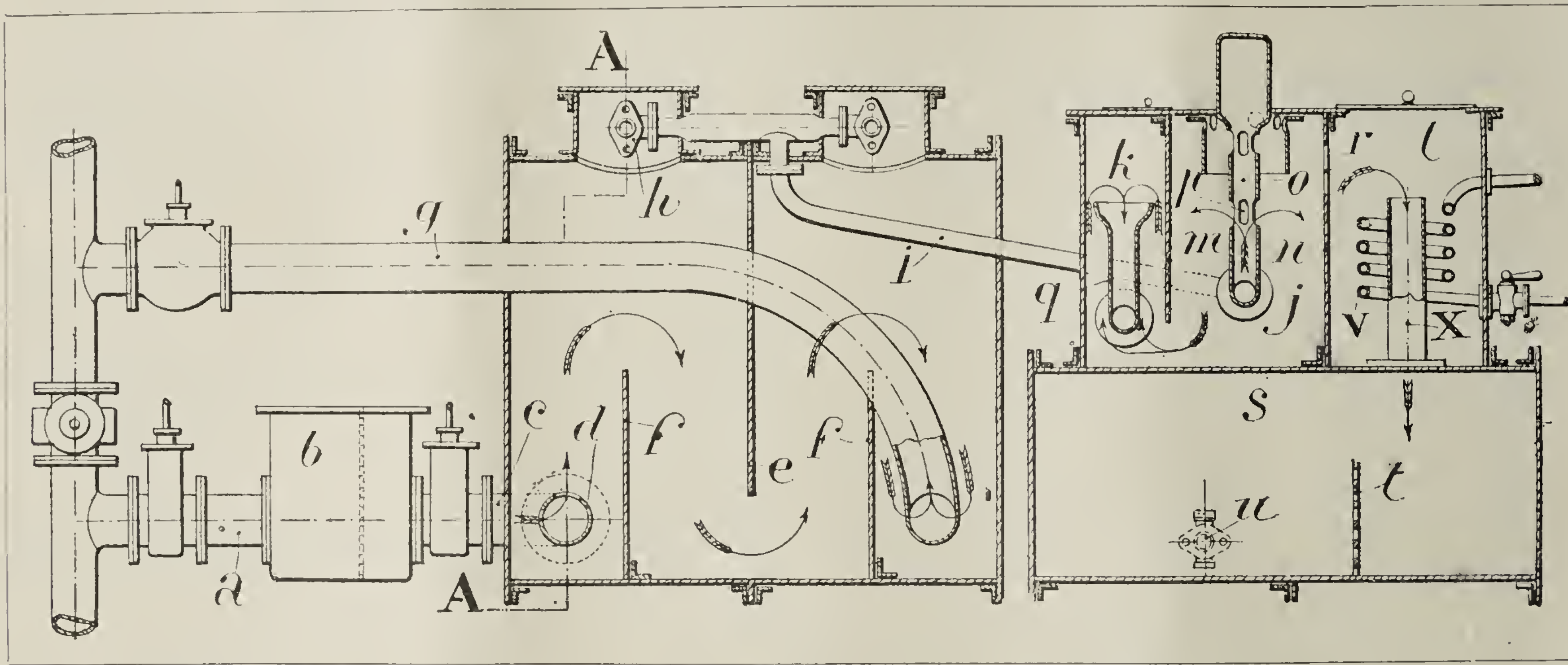
The apparatus is more particularly intended for use in connection with those engines and machines in which the oil is liable to become mixed with water, for instance, with water produced by the condensation of steam.

One form of the apparatus comprises a pump by means of which the mixture of oil and water is delivered to a vessel containing sieves or the like, by means of which the coarser impurities are separated from the said mixture. From the said vessel a pipe leads to a recuperating chamber, the end of the said pipe being provided with a plurality of comparatively small perforations or orifices, so that the mixture is discharged into the said chamber without disturbing the contents of the latter. The recuperating chamber is divided into a plurality of vertical partitions, extending from the bottom of the said chamber to a plane approximately half-way between the bottom and top of the latter.

Between the said partitions may be arranged another partition or other partitions extending from the top of the chamber to within a short distance of the bottom thereof. These partitions form baffles in the path of the mixture, and thus facilitate the separation of the oil from the water by gravity. To the lower part of the last compartment in the separating chamber is connected a pipe for the discharge of water, said pipe being provided with a non-return valve and connected with a delivery pipe discharging, for instance, into the sea.

The oil and fatty matter which accumulates in the upper part of the separating chamber flows through suitable cocks and branch pipes to a pipe leading to a separating chamber. The latter is divided into three compartments by means of two partitions, and the oil coming from the recuperating chamber flows into the central compartment, in which it is delivered to a perforated tube extending vertically upwards for the purpose of regulating the pressure. A space left between the bottom of the separating chamber and the lower edge of one of the partitions allows the small quantity of water which reaches the separating chamber to flow from the central compartment to one of the lateral compartments. In the said lateral compartment the water-level rises till it reaches the upper end of a vertical tube, and the water is then discharged through the latter. The lighter oil passes from the central compartment through an aperture provided in the upper part of the other partition, and thus reaches the other lateral compartment. Within the latter is arranged a vertical tube, the upper end of which is at a level slightly above that to which the vertical tube for the discharge of water from the separating chamber extends. This tube is surrounded by a heating coil, preferably a helical steam-pipe, and communicates with a vessel arranged below the separating chamber. The said vessel may be divided into two compartments in such a manner that the oil coming from the separating chamber is caused to flow from one compartment to the other through a sieve and, if desired, through a filter. The second compartment is provided with a two-way cock which allows of removing the oil by means of a hand pump and of discharging such water as may accumulate in the lower part of the vessel.

The annexed drawing is a sectional elevation giving a general view of the invention.



A pipe *a* in communication with the pump and provided with valves and a strainer *b* adapted to retain impurities conducts to the recuperator the mixture of water and oil. This pipe *a* is in communication with a a pipe *c* which enters the separator at the bottom, and is provided along its upper part with several holes out of which the substances pumped flow without shock.

The recuperator is divided into several chambers and compartments by partitions *e* and *f*. These have the effect of breaking the pressure with which the mixture arrives and of destroying the effects thereof, thus allowing fatty substances to ascend to the upper part of the apparatus by reason of the lower specific weight.

In the last compartment, near the bottom, there is provided a pipe *g* for conducting water from the recuperator back to the sea.

The oil and fatty matter collected in the upper part of the recuperator flow through pipes *h* which are connected by means of cocks, and special branch pipes to a single pipe *i* which conducts them to the separator. The latter comprises a reservoir divided into three compartments *j k l* by two partitions *m n*. The oil flowing from the recuperator, with a small quantity of water still mixed with it, passes into one of the compartments through the pipe *o* and flows out through apertures *p*. The upward prolongation of the tube *o* serves to regulate the pressure. The partition *m* is broken away at its base and allows the water to rise in the compartment *k* to the orifice of the pipe *q* through which it returns to the hold. The oil, on the other hand, floats and passes through an aperture *r* in partition *n* to the compartment *l*, from which it flows through the pipe X to the lower box *s* provided, if necessary, with a perforated partition *t* with which a filter can be connected. The oil thus filtered is drawn off by means of the cock *u*. A steam-coil V can be arranged about the pipe X to keep the oil in a fluid state.

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PRODUCTION OF CRUDE OIL IN GALICIA IN 1905.

The production of crude oil in Galician during 1905 by the various fields was as under (in tons) :—

	Stocks on Dec. 31st, 1904.	Production.	Deliveries.	Loss and used as Fuel.	Stocks on Dec. 31st, 1905.
West Galicia—					
Potok	4,824	22,479	21,389	124	5,789
Rogi	11,106	24,234	20,737	342	14,261
Rowne	171	1,609	1,467	14	299
Tarnawa, Wielopole, & Zagorz	479	32,956	24,930	245	8,260
Krosno.. ..	4,379	43,560	33,920	218	13,801
Other Fields ..	8,811	35,607	33,451	560	10,407
East Galicia—					
Boryslaw and Tustanowice..	341,204	546,556	468,042	16,400	403,318
Schodnica ..	28,337	60,202	53,016	1,984	33,550
Uryz	21,695	20,347	18,582	1,333	22,126
Mraznica ..	486	3,646	1,711	504	1,917
Other Fields ..	463	10,600	9,120	1,650	293
Total ..	421,965	801,796	686,365	23,374	514,021

Below are given for comparison the figures of the total production of crude oil in Galicia for the last 11 years :—

	Tons.		Tons.
1895	214,800	1901	452,200
1896	339,765	1902	576,000
1897	309,626	1903	713,330
1898	323,142	1904	827,116
1899	321,681	1905	801,796
1900	326,334		

◆

Messrs. John Russell and Co., Ltd., of Alma Tube Works, Walsall, the export agent for which firm is Mr. J. Gillespie, of 1, Leadenhall Street, E.C., have recently issued a most artistic shield calendar. The dates are interchangable, and the calendar, printed as it is in silvered lettering, and containing views of the works, is bound to be appreciated.

THE EUROPEAN PETROLEUM CO., LIMITED.

NOTICE IS HEREBY GIVEN that a Meeting of the Holders of the Debentures of the above-named Company, secured by a Trust Deed, dated the 6th day of July, 1900, and made between the Company of the one part, and Sir Henry Seymour King, K.C.I.E., M.P., Henry Torrens Anstruther, and Arthur Francis Pease, as Trustees of the other part, will be held at Winchester House, Old Broad Street, London, on Thursday, the 22nd day of February, 1906, at 12 o'clock noon, for the purpose of considering and, if thought fit, passing an Extraordinary Resolution as defined in the Fifth Schedule to the said Trust Deed—

1. Authorising the Company to issue not exceeding £124,000 of Debentures, ranking *pari passu* for all purposes with the existing Debentures secured by the said Trust Deed; and

2. Relieving the Company, subject to certain qualifications and conditions, for a period of five years including the year ending the 1st of May, 1906, from certain of its obligations under Clause 6 of the Conditions indorsed on the said Debentures as to the Service Fund; and

3. Providing for the modification of the rights of the Holders of the said Debentures and of the provisions of the said Trust Deed for the foregoing purposes; and

4. Authorising the Trustees of the said Trust Deed to concur with the Company in executing such Supplemental Deed or Deeds as, in their opinion, may be necessary or expedient for giving complete effect to such Extraordinary Resolution.

This Notice is given under the provisions contained in the Fifth Schedule to the said Trust Deed.

By order of the Company,

J. CLARK,
Secretary.

Dixon House, Lloyd's Avenue,
Fenchurch Street, E.C.
6th February, 1906.

Note.—*Debenture Holders wishing to vote must attend in person or by representative, and produce at the meeting the Debentures held, or a Certificate of the deposit of the Debentures with a Banker or other Firm or Company. Forms of Certificate of Deposit can be obtained at the Company's Office.*

THE EUROPEAN PETROLEUM COMPANY, LIMITED.

IMPORTANT CIRCULAR TO DEBENTURE HOLDERS.

The Secretary of the above company forwards us the following circular from Dixon House, Lloyds Avenue, E.C., dated February 6th:—

The disturbances at Baku, which have continued with very little intermission during the past year, have caused such interference with the company's operations there as seriously to embarrass its finances. It therefore is absolutely necessary that some scheme should be carried through with the least possible delay, which, while protecting the interests of the debenture holders, will provide the company with a sum of cash sufficient to meet its immediate financial requirements, and place it in a position to take advantage of a return to a normal condition of affairs.

It was hoped that substantial compensation would have been obtained by the company from the Russian Government not only in respect of the actual damaged caused to the plant, machinery and wells by the Baku revolutionists, but also in respect of the serious loss of the company's oil production owing to the suspension of work at Baku. The company presented, through the British Foreign Office, a total claim of £100,000 in respect of these two items of loss, but the Government authorities in Russia have so far declined to recognise any claim for the loss of production, and as the company was fortunate enough to sustain comparatively little actual damage to wells and machinery by incendiarism the only amount for which the company has so far been admitted to share in the Government loan to the oil producers is £2,500. Objection has been taken on the company's behalf to the insufficiency of this amount to replace even the actual damage, which amounted to about £14,000.

The company's liabilities at the present time stand at about the same amount as at the date to which the last balance sheet was made up, viz., 13th May, 1905; at that date the company had received in Baku by way of hand money under two contracts for the sale of crude oil sums amounting to £81,800; these sums would in the ordinary course have been met by the delivery of the oil sold. The balance of hand money outstanding under the first contract now amounts only to £20,000, and the acceptances given for this amount are being met by the current monthly deliveries of oil. When it became doubtful if the company would be able, in view of the shortage of its production occasioned by the strikes, to deliver under the second contract within a reasonable time, the buyers cancelled the contract, and the acceptances given for this hand money thereupon became repayable. To provide for the outstanding acceptances at Baku (in excess of the ordinary trade liabilities) a sum of from £60,000 to £70,000 cash is required. By Russian law the liabilities at Baku would, so far as the company's assets in Russia are concerned, be entitled to a priority over the claims of the debenture holders.

The directors share the belief, which is held in well-informed quarters, that the present chaotic condition of affairs in Russia cannot continue much longer. They are of opinion that as soon as the country has settled down again, the oil fields at Baku will enjoy greater prosperity than ever before, and they therefore feel justified in asking the debenture holders to make such concessions as will enable the directors to place the company's finances on a satisfactory basis.

The original debenture issue of the company was £550,000, carrying interest at 6 per cent. per annum. By the terms of issue, a sum of not less than £60,096 was to be provided by the company in each year as a debenture service fund to cover interest on the debentures and the redemption of the debentures. This large sum has up to the present been regularly provided, with the result that by purchases in the market, debentures to an amount of £174,000, of the total issue of £550,000, have been redeemed, being £37,000 in excess of the amount which would have been redeemed by the operation of the redemption fund in the ordinary way by yearly drawings. Owing to a period of low prices, followed by the disturbances at Baku, the provision of the debenture service fund has drained the company's resources.

Under these circumstances, the approval and consent of the debenture holders is asked to an issue of debentures for a limited amount ranking *pari passu* in all respects with the existing debentures, and to a resolution relieving the company (subject to certain qualifications and conditions) for a period of five years, including the year ending 1st May, 1905, from certain of its obligations under clause 6 of the conditions endorsed on the debentures as to the service fund, so far as concerns the redemption of debentures, and providing for a modification of the rights of the holders of the debentures, and of the provisions of the trust deed for the foregoing purposes.

The notice convening a meeting of the debenture holders is being sent out, but in order that their vote may be recorded at such meeting, it is necessary that they should either attend in person or by a representative, and such representative must produce at the meeting their debentures, or a certificate in writing signed by the banker, firm, or company with whom their debentures may be deposited, or with whom they may think well to deposit them so as to obtain such certificate.

The debentures to be issued will be offered for subscription in the first instance to the existing debenture holders, and in so far as they are not applied for to the shareholders of the company.

A POINTED REPLY.

In connection with the issue of the above circular, we have received the following letter:—

Sir,—A serious attempt is being made to interfere with the rights of the first mortgage debenture-holders of the European Petroleum Co., Ltd. By the terms of the trust deed a sinking fund is in progress, by means of which the debentures must be redeemed by purchase in the market or by drawings at 110 by 1915.

A meeting has been called to authorise not only the suspension of the sinking fund for five years, but to allow an amount of £124,000 of debentures to be created, ranking *pari passu* for all purposes with the existing debentures.

This seems so contrary to the spirit of the terms upon which the debentures were issued that we ask you to request holders of the debentures (which are to "bearer") to communicate with this company, so that steps may be taken to protect their rights.—Your obedient servants,

The Mercantile Investment and General Trust Company, Ltd.
Geo. Collis, Manager.

105, Winchester House, Old Broad Street, E.C.,
February 7.

AMERICAN NOTES

In South-Eastern Ohio.—The Pure Oil Producing Co has drilled a fine test well in the Berea grit pool at Woodsfield, in Monroe county. The well is said to be producing 200 barrels per day, and its situation shews a sonthern extension of the developments in south-western Ohio.

The California-Monarch Oil Company.—The records of the California-Monarch Oil Co. shew that the concern has trebled its production upon its property in the Coalinga district for the past six months. The new wells are doing a very fair production, while the old producers are now shewing some improvement.

An Important Ohio Strike.—What has been regarded as an important strike has recently been made by the Logan Gas and Mineral Co., who, while sinking a well for gas, struck the Trenton rock, and thus have opened up what is thought to be a new oil region. The district is situated in Logan county, and close to it land leases are being bought at high prices.

Californian Prices.—The latest quotations for Californian crude oil are as follows :—Coalinga: 22 deg. up to, but not including 24 degrees, 20 cents; 24 degrees up to, but not including 25 degrees, 22½ cents; 25 degrees gravity or lighter, 25 cents. Kern River: 14 degrees gravity or better, 18 cents. Santa Maria: 24 degrees up to, but not including 25 degrees, 20 cents; 25 degrees or better, 22½ cents.

An Important Canadian Oil Strike.—An important strike of oil has taken place in a well on the McGregor farm, three miles from Sarnia, in Canada. At first, the well only produced one barrel per hour, but after being shot, it began to flow at a rapid rate, yielding oil and gas in large quantities. The firm which made the strike has now leased many acres of ground in the locality, and drilling operations are to be shortly commenced.

A Few 1905 Details.—During the past year the greatest number of wells drilled for oil in the Texas district were in the locality of Humble, the number in round figures being 450. At Batson, there were 100 wells drilled, at Dayton 47, at Saratoga 43, and at Spindle Top and Sour Lake 21 each. Thus, in all, nearly 700 wells were drilled in Texas during the twelve months. During the same period over 600 wells were abandoned.

New Companies.—The Kentucky Oil and Gas Co. has just been organised of Ohio operators. A 1,200-acre tract has been secured in the Stubensville extension of Wayne county, together with a 400-barrel well recently drilled. Contracts have already been let, and work is actively proceeding on the acquired property. Another new company is the Linny Coal and Oil Co., of Danville, Kentucky, which will begin to drill immediately in Wayne county.

The Kentucky-Tennessee Fields.—The recent discovery of a new pool of extensive proportions in lower Kentucky, within a few miles of Tennessee, has inspired new life into the field, and the work now being carried out is regarded with more interest than usual. During the past three weeks there have been 32 completions in the field, and these have had an initial production of 730 barrels per day. The oil of the field is now commanding 89 cents per barrel.

Details from Jennings.—We learn from the *Oil Investors' Journal* that during the first half of January three wells were completed in the Jennings field, hut only one of these came in a producer. This was the well belonging to the Producers-Matin Co., and was their No. 6, commencing with a production of 4,000 barrels. After flowing, however, for one day, it stopped. It was put upon compressed air, and is said to now be making 2,000 barrels. The production of the field at the middle of the month was placed at 24,000 barrels.

The Panama Pipe Line.—The President of the Union Oil Co., in a recent interview upon the Panama pipe line project, stated that the arrangement was well under way, and about August the line would be ready to take oil. He stated that the pipe would prove a sustaining element in the Californian oil industry, for the demand in England and on the Atlantic coast would more than care for the surplus in California. A permanent relief for the industry was promised, while southern as well as northern producers would be greatly benefited.

RUSSIAN AND ROUMANIAN NOTES.

Mr. Paul Stein, the eminent boring engineer, has entered the service of the Steaua Romana Co. of Roumania.

The Water Flush System in Roumania.—The proposed regulations to govern the use of water flush drilling in Roumania are complete, and will shortly be put into force.

Important Loans.—On February 3rd, the Loan Committee at Baku sanctioned a loan to the Mantascheff Co, of 440,000 roubles, and to the Baku Naphtha Co. of 33,000 roubles. Altogether there has been sanctioned loans to 46 firms.

Progress at the Baku Fields.—According to the latest information from Baku the work of reconstruction at the oil fields is proceeding actively. In the case of many firms the baling operations are now proceeding without interruption, and the production has returned to its normal level.

The Consolidation of Petroleum Concessions.—The proposed modifications in the law for the consolidation of petroleum concessions in Roumania has now been elaborated by the commission entrusted with the work, and will shortly be promulgated after receiving the sanction of the Government.

Workmen's Settlements.—A decision upon the question of workmen's settlements at Baku is again being delayed at St. Petersburg. The oil fields are rapidly being rebuilt, and the workmen's dwellings are again built within the oil fields area, and in the same crowded and unsatisfactory manner as before, and the lessons of the past remain unheeded.

Baku Average Prices.—The absence of official quotations at the Baku Oil Exchange has made it difficult for the Exchange Committee to work out their usual monthly average quotations. They have succeeded, however, in working out the following average prices for December :—Light crude oil in Black City, 17 copecs per pood; crude oil at the wells, 17·2 copecs; residuals, in ships, 19·2 copecs. There was no quotation for kerosene.

The Grants to Baku Producers.—The committee for the granting of Government loans to the petroleum producers at Baku has telegraphed to the Minister of Finance to open credit at once for the full amount of the loans to be issued—2,200,000 roubles—which are needed for the work of re-construction at the oil fields in order to avoid delays. The partial granting of the loans has already brought about a revival in the kerosene export trade. At the time of writing the pipe line to Batoum was not working, but was expected to be again put in operation in a few days. There is a cheerful tone on the market.

Shipowners' Conference.—The conference of Volga shipowners, held at Nijni-Novgorod, has passed a resolution affirming the present critical condition of their trade as a result of the crisis in the petroleum industry, which has deprived them both of their carrying business and of their fuel. The members have petitioned the Government to grant them loans on easy terms on the security of their vessels. The formation of a combination of shipowners has also been resolved upon. A representative of Messrs. Nobel Bros., who was present, announced that his firm is in full sympathy with the projected combination idea. A special committee is now preparing the articles of association of the combine.

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BATOUM PETROLEUM SHIPMENTS.

The following were the shipments of petroleum products from Batoum from the 15th to 21st January (o.s.) (in thousand poods):—

	Illuminating oils		Residuals		Other products.	
	1905	1906	1905	1906	1905	1906
To Europe ..	1,035	—	—	—	2	—
To the East ..	65	135	—	—	—	—
To Russian ports	97	—	—	—	—	—
From the 1st Jan. to 21st Jan.:—						
To Europe ..	1,836	842	—	—	187	67
To the East ..	1,508	433	—	—	1	—
To Russian ports	210	127	—	—	—	5

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	1 1/16-1 3/16
Baku Russian Petroleum ..	£750,000 Ord.	£1	3/3-3/9
,, ,, ..	£650,000 5½% Pref.	£1	6/6-7/0
Californian Oilfields	£250,000 Ord.	£1	6¼-6½
European Petroleum.. ..	£550,000 Pref.	£1	3/16-5/16
,, ,, ...	£550,000 Ord.	£1	1/0-2/0
,, ,, ...	£376,000 Deb.	£100	82-87
Russian Pet. & Liquid Fuel ..	£500,000 6½% Pref.	£1	13/9-14/9
,, ,, ...	£600,000 Ord.	£1	14/9 15/9
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	3⅝-3⅞
,, ,, ...	£575,000 Ord.	£1	9/6-10/6
Shell Transport & Trading ..	£2,000,000	£1	22/3-23/3
,, ,, ,, ..	£1,000,000 Pref.	£10	9⅛-9⅜
Spies Petroleum Company ..	£312,500	10s.	7/6-8/0

SCOTCH COMPANIES.

Supplied by Messrs. Maclean and Henderson, Stirling.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. 8½ pd	£199,750	£10	18
Do. 6% Cum. Pref. ..	£100,000	£10	12½
Burmah Oil, Ord.	£1,100,000	£1	57s. 3d.
Do. Pref.	£250 000	£1	26s. 0d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	8½
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	18
Do. New (£8 10s. pd.)	£131,750	£10	16¼
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	81s. 6d.
Do. 6% Cum. Pref.	£100,000	£10	12¾
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	36s. 0d.
Young's Paraffin Co., Ltd., Ord...	£452,808	£4	65s. 6d.
Do. "B" Deb...	£150,000	£100	147

RUSSIAN COMPANIES.

Company.	Nom. Value in Roubles.	Quotations on Feb. 5. Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	465	470
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	3,900	4,000
Melikoff, A C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	174	176
Neft Co.	250	—	—
Nobel Bros.	5,000	8,650	8,750
,, ,, ...	250	—	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

DUTCH COMPANIES.

Company.	Quotations Feb. 2nd.	Quotations Jan. 31st.	Florins.
Arnhemsche Petroleum Mij. ..	80	81	1,000
Dordtsche Petroleum Mij. (Pref.) ..	126	126	500
,, ,, ,, (Deb. 4½%)	102¾	102¾	1,000
Elzasser Petroleum Mij.	44¼	44⅜	1,000
Gaboes ,, ,, ...	19¾	19¾	—
Holl. Rumeensche Petroleum Mij...	24¼	19¾	1,000
Int. Rum. Pet. Mij.	87	91	500
Java Petroleum Mij...	30	30	1,000
Koninklyke Nederl. Pet. Mij. Shares	430–441	394½–396	250-1,000
,, ,, Share certificates	735	391–395	1,000
Mœara Enim Petroleum Mij. ..	111–112½	108½	100
,, ,, 1-1,000 Oblig. 5	102	102	250-1,000
"Moesi Ilir" Petroleum Mij. ..	33½	33½	—
Nederl.-Rumeensche Petroleum Mij.	16	16	
Nieuwe Ned. Petroleum Mij. And...	55¼	55¼	1,000
Oliebronnen in Hannover Mij. ..	170	177	—
Panolan Maatschappij Cert. ..	356	350½	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	136	138	1,000
,, ,, (Common) ..	91½	92⅝	—
Sumatra-Palembang Petroleum Mij	59	58¾	500

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Spies Petroleum Co., Ltd.—The output for the week ended February 4th was 135,630 poods, or 2,187 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended February 4th was 182,000 poods, or 2,935 tons.

Baku Russian Petroleum Co., Ltd.—The production for the week ended January 28th was 267,000 poods, or 4,306 tons.

The European Petroleum Co., Ltd.—The production for the week ended February 4th, 1906, was 85,877 poods, or 1,384 tons.

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Baku Production.—The production of crude oil at the Baku oil fields during the first 15 days of January (o.s.) amounted to 14,860,000 poods, which includes 196,200 poods produced by spouters. A spouter is flowing on one of the Mantascheff properties.

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 8th February, 1906, as follows:—

Prices are unchanged and firm as below. A large amount of business in oil sizes has been put through in the past week for delivery over the present half year, and there is also a fair demand for other markets.

IC	18¾ × 14	124 sheets	110 lbs.	13/4½ to 13/6 per box.
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IC	20 × 10	225 ,,	156 ,,	18/7½ to 18/10½ ,,

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◆

PRODUCTION OF DUTCH-INDIAN COMPANIES.

The production of crude on the properties of the Perlak Petroleum Maatschappij, in Sumatra, held on lease by the Royal Dutch Co., and the royalties accrued thereon in 1905, compared with 1904, was as under:—

	Production. Tons.	Royalty. Florins.
1905	190,841	477,182
1904	203,892	509,730

The output of illuminating oil by the Mines, Forests, and Land Exploitation Co., of Langkat, in 1905 amounted to 1,896,077 units, against 1,694,735 units in 1904.

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The Petroleum Industrial & Technical Review, Ltd.

SATURDAY, FEBRUARY 10TH, 1906.

THE BAKU RIOTS: THEIR CAUSES AND RESULTS.

THE causes which led up to the disorders in the Caucasus during the early part of last year, and which tended so much to bring about the temporary downfall of the Russian petroleum trade, especially with this country, remain no longer a matter for conjecture, for Senator A. M. Kuzminsky, who was commissioned by the Emperor to make a thorough investigation of the matter, has now issued his report, which is published at length in the Russian press.

Pressure upon our space this week has rendered it impossible to reproduce the full text of this interesting statement, but in view of its importance it is imperative that some reference should be made to it in our columns.

As we have already inferred, the report in itself is a very comprehensive document, and in addition to containing a mass of statistical information, deals very thoroughly with every side of the social, commercial and industrial life of the district.

In speaking of the causes of the riots, Mr. Kuzminsky admits that the evidence in favour of the idea that the massacres were organised by the authorities is very strong, for throughout they have shewn a friendly disposition to the Tartars, and no little amount of hostility to the Armenians. Notwithstanding this, however, he is of the opinion that the authorities did not organise the riots, for the main reason that they were entirely absorbed in the pursuit of personal gain, and were shortsighted; consequently they were incapable of exercising that amount of ability and cunning which the organisation of the outrages necessitated.

This statement in itself is sufficient to shew the cause for the general insecurity that has continuously hovered over life and property in the Caucasus in times past, and to the letter does it bear out the frequently expressed opinions in these columns that so far as good government was concerned, the administration of the oil field districts of Southern Russia lived in name only.

The guilt of the authorities, as Mr. Kuzminsky remarks, is restricted to their general criminal inactivity and leniency toward the rioters, which made it easily possible for the revolt to spread to such terrible dimensions.

The primary causes of the disorders can, of course, be traced to the long-standing racial feud between the two nationalities, for the hostility of the Mussulmans toward the Armenians is well known, but it is upon the shoulders of the police that the whole of the responsibility for the seriousness of the disturbances of last year may be placed. Mr. Kuzminsky does not mince matters in this respect, and as will be seen from an extract of his report on another column of this issue, his report constitutes a wholesale condemnation of the force. The police, he points out, are not only absolutely incompetent to discharge their duties, but from the highest to the lowest are guilty of all forms of corruption. Crimes committed in the broad light of day go undetected, and it has frequently been proved that the responsible criminals can be detected far sooner without the aid of the force than with it.

Amid such surroundings and under conditions which say so little for the security of life and property, it is no wonder that the Russian petroleum industry has so frequently been subject to such serious set-backs as have overtaken it during the past few years. What with a Government which, on the one hand, has, until quite recently, been unconscious of the importance of the petroleum industry, and the strained animosity between the two nationalities on the other, it is little wonder that the populace has practically turned against the Government—a fact which in its train has brought a state of stagnation to every branch of the Russian oil trade.

The unsettled condition of the Russian petroleum industry, consequent upon the disorders in the Caucasus, has had most unfortunate results in a number of directions. It has brought about a greatly decreased production of crude oil, which has created chaos in the refining branch of the industry, for the refineries were not able to run at their full capacity, and the deliveries of petroleum products therefore were substantially reduced; it has caused the country's petroleum export trade to be strangled for many months; but even more serious still, it has brought such a condition of things in the lubricating branch of the industry, that this important and profitable trade has, to a great extent, been irretrievably lost to Russia. The trade in kerosene, we know, declined considerably, but that in lubricating oil was for a long time practically stopped.

The result has been that an enormous impetus has gone to the American lubricating oil trade, and we are now given to understand that all the production of lubricating oil in Texas—amounting to about 120,000 barrels—has been sold up to the end of this year for the European markets. The Texas lubricant is in every respect equal to the Russian product, with the exception that its specific gravity, instead of being ·910, is about ·930. It is this difference that has in the past prevented the Texas lubricating oil making much progress, but, owing to the absence of the Russian lubricant, advantage has been taken of the Texas product, which has undoubtedly come to stay upon the markets of Europe.

The advent of the Texas lubricating oil is full of serious consequences to the Russian petroleum industry, yet years ago, with the discovery of some of the important Texas fields, we suggested that it was within the range of probability that the Texas lubricant might at some date step in to the disadvantage of the Russian product.

The causes which have led up to the lamentable riots in the Caucasus are very serious, the disasters themselves were even more serious, but the results which they have occasioned are the most serious that could ever befall an important industry, and, though partial remedies may be forthcoming, the blow given to the Russian petroleum trade will be long lasting.

LONDON OIL SHARE MARKET.

Friday, Feb. 9th.

Business has been a little more active during the past week in the oil group of the London Stock Exchange, but taken as a whole there is a decided tendency towards lower prices, although Schibaieff Ordinary proves an exception, having advanced 1s. per share. On Tuesday, at the fortnightly carry-over, the rate for interest was 6 per cent. to 8 per cent., and the only advances registered were 9d. in the case of Russian Ordinary at 14s. 9d., and 6d. in Schibaieff Ordinary at 10s. 6d. On the other hand, Californian Oilfields fell ¼ at 6½, Baku Ordinary 6d. at 3s. 6d., Schibaieff Preference ⅛ at 3⅝, and Shell Transport Ordinary 6d. at 22s. 3d. Baku Preference at 7s., Spies at 8s. 6d., and Anglo-Russians at ⅛ shew no change.

For a *resumé* of the week we revert to Saturday last, when Anglo-Russians were quoted 1/16-⅛, Assam Oil ⅝-⅞, Baku Ordinary 3s. 9d. to 4s. 3d., Preference 7s. 3d. to 7s. 9d., Bibi-Eybats ½-⅝, Debentures 88-93, Californian Oilfields 6½-6¾, European Preference 3/16-5/16, Debentures 87-91, Schibaieff Ordinary 9s. 9d. to 10s. 3d., Preference 3⅝-3⅞, Russian Ordinary 14s. 6d. to 15s. 6d., Preference 14s. 6d. to 15s. 6d., Debentures 91-94, Spies 13/16-15/16, Shell Transport Ordinary 22s. to 22s. 6d., nnd Preference 9½.

From these figures, the only alterations were a fall of 1/32 in Spies at 13/32-15/32 on Monday, and a decline of one point in Russian Debentures at 90-93, and of ⅛ in Californian Oilfields at 6⅜-6⅝ on Thursday, while on the same day Schibaieff Ordinary rose 1s. to 10s. 9d. to 11s. 3d.

BAKU PETROLEUM DELIVERIES FOR THE FIRST NINE MONTHS OF 1905.

Like all the rest of the statistics regarding the Baku petroleum industry, the figures of the deliveries of oils from Baku are also very late; and we have now before us only the figures for the first nine months of 1905. These already reveal the changes resulting from the disorders.

During the nine months there were forwarded by the Transcaucasian Railway only 22,800,000 poods of kerosene against 59,100,000 poods in the corresponding period of 1904. Thus there was a great decrease mainly in the export trade, whilst the deliveries to Astrakhan, for the Russian market amounted to 36,100,000 poods, against 45,800,000 in 1904. Shipments to Petrovsk, the auxiliary export route, also shew a great shrinkage, having amounted to only 6,000,000 poods, against 15,500,000 poods for the corresponding period of 1904. The total deliveries of illuminating oil during the nine months were 68,500,000 poods, against 125,200,000 poods in the corresponding period of 1904.

There is no marked change in the figures of the deliveries of residuals. The total deliveries of residuals amounted to 254,400,000 poods against 269,300,000 poods; the decrease falls partly in the consignments by rail (9,500,000 poods, against 13,500,000 poods); the Transcaspian district, 7,100,000 poods, against 11,600,000 poods; and to Astrakhan, 231,100,000 poods, against 238,100,000 poods. The great difference between the operations in kerosene and in residuals is that the reduction in the output and deliveries of kerosene was intentional, both in view of the difficulties in exporting from Batoum as well as of the increased demand for liquid fuel which brought about the utilisation of the crude oil for fuel direct without any refinery treatment. The crude oil, after being exposed to the air for a time to allow some of the light oils to evaporate, is shipped to Astrakhan for the Russian market under the title of residuals. The shipments of crude during the nine months amounted to 21,700,000 poods against 18,100,000 poods.

The total deliveries of all petroleum products from the Baku refineries during the nine months amounted to 356,100,000 poods, against 425,900,000 poods for the corresponding period of 1904. The greatest falling off has occurred in the deliveries by the Transcaucasian Railway, 39,000,000 poods against 81,000,000 poods, which could not but seriously affect the revenue of the railway. The shipments by the Caspian Sea shew a much smaller decline—313,500,000 poods against 339,600,000 poods.

The complete figures of the deliveries for the year, when they become known, are certain to shew a still greater decline against 1904, inasmuch as in the concluding quarter of the year the trade was very restricted.

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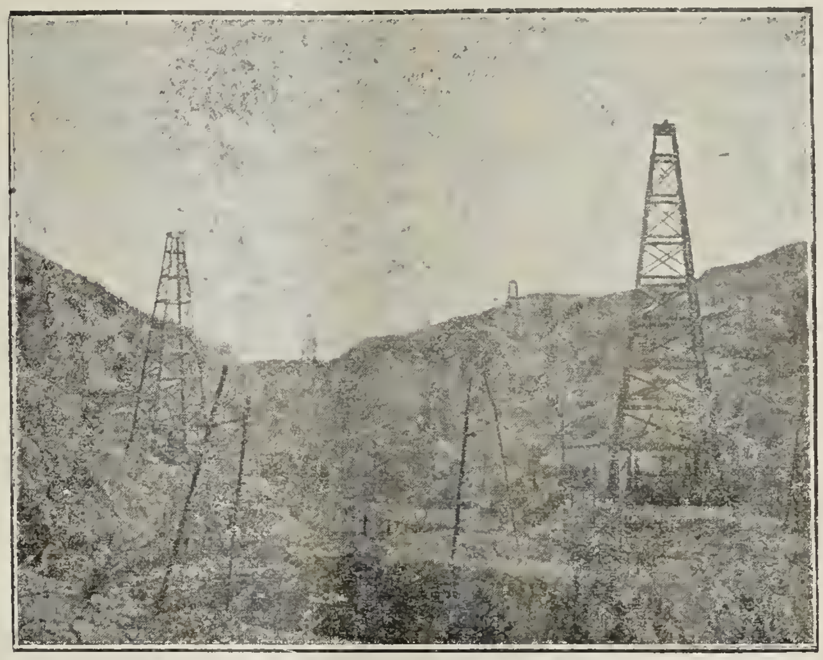
The Canadian Commercial Agent at Cape Town reports that the market in South Africa for boring machinery will be an expanding one for some time to come.

THE OIL FIELDS OF NORTHERN PERU.

Of late years there has been an increasing interest in the development of the oil fields of Northern Peru. For many years it has been known that petroleum of a heavy nature existed at several points in the provinces of Paita and Tumbes. Some of these have been developed in a commercial way within the last 10 or 15 years. The oldest fields now placing oil on the Peruvian markets are those situated at Nigritos and Zorritos. At Lobitos, however, about 20 miles north of Nigritos, and on the coast, is a new field recently developed by the Peruvian Corporation. In this locality, says a writer in the American *Engineering and Mining Journal*, exploratory work has been carried on for nearly three years, on a somewhat modest scale. The first work in the field was attended with various difficulties, which seriously hampered and interfered with rapid exploration. At the present date 17 wells have been put down, and eight of them are now producing oil. The most productive ones have been bored during the last 10 months. The oil-bearing sand is tapped at a depth of about 1,000 feet. Above the sands the entire series of deposits is made up of very fine clays. In such of the wells as have penetrated the oil sand, the fine clay again appears. Only a few feet has been penetrated below the oil horizon. From the structure of other fields it would seem quite probable that other oil sands may be found at a greater depth. No effort has been made, however, to demonstrate this suggestion. There are 1,000 tons of tankage, all of which is filled with oil. The product already on hand is soon to be placed upon the Peruvian markets. Sufficient work has been done and results obtained to place this field on the list of producers in Peru.


A View in the Zorritos Field.

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THE LEAMINGTON OIL FIELD.

We learn from the *Oil City Derrick*, in a recent issue, that a well-known Ohio contractor has recently returned to Findley, after having spent some time in the Leamington oil field in Ontario. He has stated that the Leamington field, for the development of which so many great hopes were entertained, is now regarded as a thing of the past, for nearly all the wells in that territory have been either abandoned or "pulled." Most of the dealers in oil well machinery, including the National Supply Co., are, we learn from the same source, preparing to move their branches to more encouraging districts. The property of the New York Oil Co., of Leamington, has already been sold to a Salvage concern.

THE CAUSES OF THE BAKU RIOTS.

The Russian Government has recently made public the report of Senator A. M. Kuzminsky, who was commissioned by the Emperor to investigate the causes of the riots and massacres at Baku in February, 1905, and the general state of affairs there.

The real cause of the disorders the author finds in the long-standing racial feud between the two nationalities. In this connection, he points out, that whilst the Armenians disclaimed to him any ill-feeling towards the Mussulmans, prominent representatives of the latter openly declared their hostility towards the Armenians, whom they accuse of bad faith and unscrupulousness in advancing their own well-being at the expense of other nationalities ; that they have succeeded in influencing the Russian Government in their favour, who have had afforded them every facility for their material, moral and intellectual development, which were denied to the Mahomedans.

The author then proceeds to give some statistics to shew the relative positions of the two nationalities at Baku. The population of Baku is divided as under :—

	Indegenous Population. Per cent.	Total Population. Per cent.
Moslems	60½	43
Russians	18¼	29½
Armenians	18¾	21
Other Nationalties ..	2	6½
	100	100

Thus the Moslems constitute the vast majority of the permanent population, but in the total population, although still in a majority, they have their preponderating position, due to the fact that the Moslems are taking comparatively little interest in the petroleum industry which is mainly responsible for attracting outsiders to Baku.

The area and value of the lands held by the different nationalities in Baku, is as under :—

	Area of land. Per cent.	Value for Taxation. Per cent.
Moslems	82·3	16
Armenians	10·5	31
Other Nationalities ..	5	25
Collective Ownership ..	2·2	28
	100	100

This shews that while the bulk of the land (agricultural) is held by Moslems, the valuable petroliferous lands are held by the Armenians or companies controlled by them ; the Moslems take but little interest in joint stock companies. Exactly the same state of affairs prevails in the ownership of houses in the town of Baku.

The figures of general possession of property in Baku shews this contrast in a more marked degree :—

	Proportion of Estates.	Rateable Value.	Per cent. of Rateable Value.
Moslems	57·6	1,014,950	3·3
Armenians (individual and collective)	26·6	13,618,950	44
Other nationalities ..	7·3	2,447,820	8
Collective property of different nationalities ..	8·5	13,873,845	44·7

All the more profitable trades and industries are chiefly in the hands of the Armenians. They hold 40 per cent. of the total production of crude oil, whilst the Moslems control not more than 5 per cent. The latter are entirely excluded from the tobacco, wine and spirit trade, 50 per cent. of which are in the hands of Armenians. The author, however, considers the ill-feeling of the Moslems against the Armenians as unjustified, as the inferior position of the Moslems is due entirely to their own lack of enterprise. There are scarcely any Moslems among the professional classes, or men of higher education. The contrast between the Moslems and Armenians is clearly shewn in the number of pupils at the Baku grammar schools per 1,000 males of population, which for Moslems is 3·2 ; Russians, 39 ; Armenians, 69 ; and other nationalities 65·6 per cent.

M. Kazminsky considers that this animosity of the Moslems towards the Armenians, born of envy and a feeling of having been left in the cold, coupled with the ferment brought about by the introduction of the revolutionary propaganda at Baku was sufficient, so that an insignificant event, such as the murder of a Tartar by Armenians, should set ablaze the mass of inflammable material which had been accumulating for years.

The section of M. Kuzminsky's report dealing with the police states that the men are all iiliterate, the sub-inspectors can scarcely read and write, whilst the inspectors are also badly off for education. Owing to the high cost of living at Baku and the small pay, the police force is joined only by men who are either unable to find other employment or expect to make money by extortion. Naturally such a force could not be expected to do their duty in maintaining public security. Everybody knows of the existence of organisers of crimes known as "Kochi," but they remain hidden to the police. Again there are certain tea-shops where idle Moslems congregate, which are a kind of public bureaux for the hire of murderers, at a few roubles, but the police cannot discover them. No similar force could ever fall to lower depths. There is not a man in the force who is not guilty of corruption. In the matter of detection of crime, it has frequently been proved that crimes can be more quickly investigated if the police are not allowed to interfere.

PETROLEUM MONOPOLY IN SERVIA.

The petroleum trade constitutes a Government monopoly in Servia. The Government are obtaining their supplies of illuminating oil and residuals from Batoum through the intermediary of the Russian Navigation Co. on the Danube. The present contract will remain in force till January 1st, 1909. In 1904 Servia imported 5,763 tons of oil of a value of 780,811 francs, and in 1903, 4,975 tons of a value of 502,510 francs. Lubricating oils are outside the monopoly, but their use is very small. In 1903 the value of the lubricating oils used in the country was 114,171 francs, and in 1904, 30,949 francs. These oils also come from Russia *via* Budapesth.

TANK STEAMER CHARTERS DURING 1905.

The following is the concluding part of the list of Tank Steamer Charters, made in the United Kingdom during the past year, and compiled by Messrs. Henry Funck and Co., Billiter Street, London, E.C., and will be of value to our readers. The Charters made during the first six months of the year appeared in our last issue upon pages 93 and 94.

	TONS CAP.	RATE PER TON.	PORTS OF SHIPMENT AND DESTINATION.	NUMBER OF VOYAGES.	CARGO.
July	5200	10/6	Black Sea—Continent (Ostende-Bremerhafen)	1	Refined.
		11/-	,, Hamburg		
	3600	13/-	Philadelphia—Rouen	1	Crude.
	3900	11/-	Batoum—Hull	1	Refined.
	6000	10/9	,, London	1	,,
	3000	17/-	Port Arthur (Texas)—London	1	Gas Oil.
Aug.	4600	14/-	United States—West Coast Italy, or Sicily	1	Refined.
		15/6	,, Venice		
	6100	11/-	Batoum—London, or Manchester	1	,,
	3800	11/6	,, or Novorossisk—United Kingdom, or Continent	1	Lubricating Oil.
	5000	11/- 1 port 11/6 2 ports	,, Steilene and/or Bergen	1	Refined.
	3900	11/-	Philadelphia—Hull	1	Refined and/or Gas Oil and/or Lubricating Oil
	4300	11/6	United States—East Coast Norway	1	Refined.
Sept.	4500	13/-	Kustendje—French Atlantic Ports	1, 2 or 3	Spirit.
		14/3	,, Rouen		
	6000	10/-	United States—United Kingdom or Continent (excluding Hamburg	1	Refined.
		10/6 2 ports	,, Sunderland and Shields		
		11/-	,, Any other two Ports		
	5400	10/-	,, United Kingdom	1	Gas Oil.
	3500	6/-	Hamburg—Rouen	1	Refined.
	4800	11/6	United States, or Batoum, or Novorossisk, or Kustendje—Bordeaux River, or La Pallice, or Havre, or Dunquerque, or Calais	2	Crude and/or Distillate.
		12/6	United States, or Baoum, or Novorossisk, or Kustendje—Rouen		
	4500	14/-	United States—West Coast Italy	1	Refined.
		15/6	,, Venice		
	5000	14/- 1 port 14/6 2 ports	,, West Coast Italy	1	,,
		15/4½	,, Venice		
	5000	14/- 1 port 14/6 2 ports	,, West Coast Italy	1	,,
		15/4½	,, Venice		
	5100	10/3	,, Manchester	1	,,
	3900	13/6 2 ports	Philadelphia—La Pallice and Rouen	1	,,
	60/6500	11/6	,, Havre	1	Crude.
	3600	12/9	United States—Rouen	1	Refined.
		11/9	,, French Atlantic Port		
	3800	12/-	Kustendje—United Kingdom	1	Residuum.
		12/6	Sulina, or Braila—United Kingdom		
	5000	11/9	United States—United Kingdom, or Continent (Bordeaux-Hamburg inclusive)	1	Crude.
	5400	11/6	United States—Havre, or Bordeaux	1	,,
		12/6 1 or 2 ports	,, Rouen, or Havre and Rouen		
	5000	14/-	Philadelphia—Savona	1	Refined.
	3800	13/-	Kustendje—Rouen	1	Distillate.
		13/6	Braila—Rouen		
	2800	10/-	United States—United Kingdom	1	Refined.
	6200	10/-	,, ,, or Continent excluding Hamburg	1	Refined and/or Gas Oil and/or Lubricating Oil
	3200	13/6	,, Aarhuus	1	Refined.
	3800	12/6	,, Lisbon	1	,,
		13/- 2 ports	,, Lisbon and Oporto		
	3200	13/-	,, Bergen	1	,,
Oct.	3000	14/-	,, Bordeaux River, or Havre, or Rouen, or Dunkerque	1	Crude and/or Distillate.
		13/-	Batoum, or Novorossisk, or Kustendje—Bordeaux River, or Havre, or Rouen, or Dunkerque		
		13/9	Braila—Bordeaux River, or Havre, or Rouen, or Dunkerque		
	3800	12/6 1 port 13/6 2 ports	Philadelphia—United Kingdom	1	Gas Oil.
	4600	12/-	Kustendje—Manchester	1	,,
	2400	16/-	Braila—Vallö	1	Refined.
	60/6500	11/6	New York, or Philadelphia—Dunkerque	1	Crude.
	4300	11/-	Batoum—London	1	Refined.
		13/- 2 ports	,, ,, and Manchester		
	4600	12/-	Kustendje—Manchester	1	Gas Oil.

TANK STEAMER CHARTERS—*Continued.*

	TONS CAP.	RATE PER TON.	PORTS OF SHIPMENTS AND DESTINATION.	NUMBER OF VOYAGES.	CARGO.
Nov.	3500	17/-	Port Arthur (Texas)—Continent (Ostende-Hamburg) ..	1	Gas Oil.
	6100	10/-	United States—United Kingdom, or Continent (Ostende Bremerhafen	1	Refined and/or Gas Oil and/or Lubricating Oil.
	6000	10/-	,, United Kingdom, or Continent (Ostende-Hamburg)	1	,, ,,
	3000	17/6 1 port 19/- 2 ports	Port Arthur (Texas)—London and/or Liverpool	1	Crude.
	2800	11/6	Batoum—United Kingdom	1	Refined.
	3300	15/-	Philadelphia—Cette	1	Crude.
	5000	10/- or 10/3	Black Sea—United Kingdom	1	?
Dec.	5400	9/9	United States—London	1	Gas Oil.
	3800	12/6 1 or 2 ports	,, Lisbon and/or Oporto	1	Refined.
	6000	16/- 1 port 17/- 2 ports 18/- 3 ports	Port Arthur (Texas)—United Kingdom, or Continent (Ostende-Hamburg	1	Gas oil.
	5200	10/6	United States, or Black Sea—United Kingdom, or Antwerp, or Amsterdam, or Rotterdam, or Geestemünde		
		10/9	United States, or Black Sea—Hamburg		
		11/6	,, ,, Bordeaux River, or Havre or Dunkerque ..	1	Refined.
		12/-	,, ,, Rouen		
		12/- 2 ports	,, ,, Havre and Rouen ..		
	4500	7/-	Batoum, or Novorossisk—Alexandria	1	,, ,,

N.B. 1.—A very large number of charters have been made during the year for steamers to trade between ports in the Black Sea and ports East of the Suez Canal and in the Far East, the particulars of which have not been disclosed.

N.B. 2.—This compilation is to be considered as being only approximately correct, for the reason that it is not possible to trace every charter made, the exact rates paid, and all the conditions agreed upon.

DETAILS OF THE OPERATIONS OF THE BAKU REFINERIES.

The output of benzine distillates at the Baku refineries in June amounted to 109,243 poods. In the first six months of 1905 the output was 609,180 poods, against 536,514 poods in the first half of 1904.

The crude material used for the manufacture of benzine is the light gasolene obtained by the distillation of the crude oil in the kerosene refineries. It is interesting to note that whilst the quantity of this product obtained in the six months of 1905 was 6,933,120 poods, only 640,204 poods of it were submitted to re-distillation in the benzine stills, the rest being burnt as fuel under the stills and partly put back into the stills.

The output of solar oil is given in detail below :—

	June, 1905.	January–June. 1905.	January–June. 1904.
Light Solar Oil—			
Kerosene Refineries ..	175,863	827,619	1,190,481
Lubricating Oil Refineries.	987,765	428,603	6,770,254
Heavy Solar Oil—			
Kerosene Refineries ..	—	—	82,978
Lubricating Oil Refineries.	250,938	2,096,358	1,810,401

Out of the total quantity of light solar oil produced in the first half of 1905, 156,127 poods were submitted to refining, and 98,122 poods were used as fuel at the lubricating oil refineries. Of the heavy solar oils, 78,084 poods were used as fuel at the kerosene refineries, and 463,628 poods were used as fuel at the lubricating oil refineries.

A careful analysis of the figures of the refining operations reveals the following interesting facts :—The yield of kerosene from the crude oil in the first half of 1905 represents only 25·15 per cent., against 31·65 per cent. for the corresponding period of 1904, a decline of 6½ per cent., whilst on the other hand the yield of residuals shews an increase from 62·66 per cent. to 68·06 per cent., an increase of 5·4 per cent.

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DETAILS OF THE PRODUCTION OF CRUDE OIL AT THE BAKU OIL FIELDS IN JULY, 1905.

The details of the production of crude oil at the Baku oil fields in July of last year have just been published. They are as under :—

Field.	No. of Wells in Exploitation.	Production. By Baling.	Production. By Spouters.	Production. Casual.	Total.	Aver. per well per day.
Balakhany ..	620	6,568,744	—	8,575	6,577,319	369
Saboontchi ..	574	15,378,927	692,600	290,332	16,361,859	964
Ramany ..	175	9,335,735	239,000	—	9,574,735	2,195
Bebe-Aibat ..	187	13,990,071	910,700	23,500	14,924,271	2,675
Total ..	1,556	46,176,277	1,842,300	322,407	47,438,184	1,060

Apart from the above there was produced at Binigadi from 12 wells, 16,120 poods; and at Zabrat from 1 well, 6,300 poods.

The production by spouting in July was obtained from the following wells :—

Field.	Firm.	No of Plot.	No. of Well.	Production poods.
Saboontchi ..	Ter-Akopoff ..	No. 63	No. 6 ..	163,000
,, ..	Nagieff	No. 23c	No. 22 ..	529,600
Ramany ..	Nobel	No. 32	No. 350 ..	239,000
Bebe-Aibat ..	Baku Naphtha Co..	No. 6	No. 4 ..	32,000
,, ..	,, ,, ,,	—	No. 5 ..	63,200
,, ..	Zoubaloff	XX group	No. 20 ..	700,500
,, ..	Schibaieff Co. ..	No. 29	No. 7 ..	115,000
	Total ..		7 wells.	1,842,300

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Texas Light Oil Production.—The production of the Corsicana and Clay county fields during last year amounted to about 400,000 barrels, this quantity representing the total light oil production of Texas.

AMERICAN CRUDE PETROLEUM IN CATTLE DIPS.

The Department of American Agriculture, says a writer in the *Oil, Paint and Drug Reporter*, has discovered a method of utilising large quantities of Texas crude petroleum in the preparation of cattle dips for use, especially in combating the diseases known as Texas fever, cattle mange, sheep scab, etc. While the Texas oil seems to be peculiarly suited to the preparation of an efficient emulsion, other crude oils, particularly those from the California field, are regarded as available for the same purpose. A brief bulletin on the subject has been prepared by the Department as follows:—

"Kerosene has long been recognised as a most efficient insecticide, but its irritating action, as well as the very considerable cost involved, has prevented the use of the pure oil as a local application in the various parasitic skin diseases of animals.

"In order to overcome these objections, various expedients have been resorted to, all of which had for their object the dilution or emulsification of the kerosene. Probably the best known and most generally employed method for accomplishing this result is that which is based upon the use of soap as an emulsifying agent. The formula which is used almost universally for making the kerosene soap emulsion is as follows:—

Kerosene	2 gallons
Water	1 gallon
Hard Soap	½ pound

"The soap is dissolved in the water with the aid of heat, and while this solution is still hot the kerosene is added and the whole agitated vigorously. The smooth white mixture which is obtained in this way is diluted before use with sufficient water to make a total volume of 20 gallons, and is usually applied to the skin of animals or to trees or other plants by means of a spray pump. This method of application is used because the diluted emulsion separates quite rapidly, and some mechanical device, such as self-mixing spray pump, is required to keep the oil in suspension.

"It will be readily understood that this emulsion would not be well adapted either for use as a dip or for application by hand, for in one case the oil, which rapidly rises to the surface, would adhere to the animals when they emerged from the dipping tank, and the irritating effect would be scarcely less than that produced by the plain oil, and in the second case the same separation of the kerosene would take place, and necessarily result in an uneven distribution of the oil on the bodies of the animals which were being treated.

"Within recent years it has been found by the Bureau of Animal Industry that a certain crude petroleum from the Beaumont oil fields is quite effective for destroying the Texas fever cattle ticks. This crude petroleum contains from 40 to 50 per cent. of oils boiling below 300° C., and from 1 to 1·5 per cent. of sulphur. Now, while this crude oil is an effective dip when properly applied, there are certain objections to its use—the cost of the oil when it is necessary to ship long distances and the occasional injury to cattle which follows its use.

"In order to overcome these objections and thereby permit the use of the oil in cases of cattle mange and sheep scab, as well as for destroying the Texas fever cattle ticks, experiments were undertaken looking to the preparation of an emulsion of the Beaumont crude oil for the uses just indicated.

"As will be inferred, the reason for preparing an emulsion of Beaumont crude petroleum was to enable the Bureau to determine whether or not the diluted oil would prove to be as efficacious as the pure oil, for if an emulsion was found to be satisfactory the injurious effects which occasionally follow the use of the pure oil could probably be done away with, and, in addition, the cost attending the use of Beaumont oil would be greatly reduced.

"There were two properties which seemed to be essential for any emulsion which was to be used as a dip, or which was to be applied by hand. First, the concentrated form of the emulsion should remain uniform indefinitely, this being necessary because the emulsion probably could not always be used immediately after its preparation, and under such circumstances, if the oil and water should separate upon standing, different portions removed from the stock would vary in composition; second, the oil should not separate rapidly from the water after dilution of the concentrated emulsion, as is the case with the ordinary kerosene emulsion. Without this property the diluted emulsion would possess no advantage over a layer of oil on water, for the animals would take out each time practically the same quantity of oil, the irritating effects would be practically the same, and in addition it is doubtful whether the oil would be evenly distributed over the body of the animal.

The first trials with the kerosene emulsion formula given above shewed that, although the Beaumont oil could be readily emulsified, the oil and water in the concentrated emulsion always separated, upon standing. When this concentrated emulsion was diluted, the oil separated less rapidly than kerosene from a similarly prepared emulsion, but yet more rapidly than seemed desirable for a dip. With the object of eliminating these objectionable features, if possible, a number of modifications of the kerosene emulsion formula were tried by varying the proportion of first one ingredient and then another. After a number of trials of different combinations of crude oil, soap and water, the following formula was decided upon as the one best suited to the uses we had in view:—

Crude petroleum	2 gallons.
Water	½ gallon.
Hard soap	½ pound.

"Dissolve the soap in the water with the aid of heat; to this solution add the crude petroleum, mix with a spray pump or shake vigorously and dilute with the desired amount of water. Soft water should, of course, be used. Various forms of hard and soft soaps were tried, but soap with an amount of free alkali equivalent to 0·9 per cent. of sodium hydroxide gave the best emulsion. All of the ordinary laundry soaps that were examined were quite satisfactory, but toilet soaps in the main are not suitable.

"An emulsion of crude petroleum made according to this modified formula remains fluid and can be easily poured; it will stand indefinitely without any tendency toward a separation of the oil and water, and can be diluted in any proportion with cold soft water. After sufficient dilution to produce a 10 per cent. emulsion, a number of hours are required for all of the oil to rise to the surface but if the mixture is agitated occasionally no separation takes place. After long standing the oil separates in the form of a cream-like layer, which is easily mixed with the water again by stirring. It is therefore evident that for producing an emulsion which will hold the oil in suspension after dilution the modified formula meets the desired requirements.

"In preparing this emulsion for use in the field, a large spray pump capable of mixing 25 gallons has been used with perfect success.

"In using the formula herewith given, it should be borne in mind that it is recommended especially for the crude petroleum obtained from the Beaumont oil fields, the composition of which has already been given. As crude petroleum from different sources vary greatly in their composition, it is impracticable to give a formula that can be used with all crude oils. Nevertheless, crude petroleum from other sources than the Beaumont wells may be emulsified by modifying the formula given above. In order to determine what modification of this formula is necessary for the emulsification of a given oil, the following method may be used:—

"Dissolve one-half pound of soap in one-half gallon of hot water; to one measure of this soap solution add four measures of the crude petroleum that is to be tested and shake well in a stoppered or flash for several minutes. If the proper proportions of oil, soap and water have been used, a perfectly uniform mixture should result when one part of this emulsion is shaken with seven parts of water. If, however, after this dilution there is a separation of a layer of pure oil within half-an-hour, the emulsion is imperfect, and a modification of the formula will be required. To accomplish this the proportion of oil should be varied until a good result is obtained.

"The object of this paper is to indicate the ease with which crude oil may be diluted by a process of emulsification, and also to shew that the use of such emulsions for dipping or for hand application is entirely feasible. Their value as insecticides can only be determined by means of practical tests. Experiments are already under way with various parasitic skin diseases of animals, and it is hoped that the use of this emulsion may not only lessen the cost of applying the oil, but that the dilution with water and the presence of soap in the mixture may remove all danger of irritation, which, as has been noted, sometimes follows the use of the pure crude petroleum."

PATENT.

Application Published in Great Britain.

Improvements in the Destructive Distillation of Coal and Other Substances and in Apparatus therefore.—John Bowing, Tilbury, Essex. No. 580 of 1905.

This relates to a method of effecting the destructive distillation of coal and other substances, and consists in subjecting the same to the action of super-heated steam passed through chambers or passages in the walls of a retort in such a manner that a practically uniform temperature will be maintained over the whole area.

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The "Review" Shipping List.

Feb. 8, 1906.

Specially Prepared for this Journal.

Note.—Except when otherwise stated the Vessels are Steamers.

(The following abbreviations are used in this table:—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Sables d'Olonne	Philadelphia	L. Jan. 22
ALCHYMIST	Salzaete	London	Arr. Feb. 3
AMERICAN	Antwerp	New York	Arr. Feb. 7
APPALACHEE	SanFrancisco	Shanghai	L. Dec. 24
APSCHERON	Batoum	Venice	Cl. Constant'ple, Jan. 28
ARAL	Tyne	Philadelphia	Arr. Feb. 3
ARAS	Newport	Batoum	L. Const'iple, Jan. 24
ARGYLL	Port Harford	SanFrancisco	Arr. Jan. 18
ASTRAKHAN	Tyne	Philadelphia	L. Jan. 24
AUGUST KORFF	Hamburg	Philadelphia	Arr. Feb. 6
AUREOLE	Barry and New York	Philadelphia	Arr. Jan. 25
BAKU STANDARD	Alexandria	Kustendje	Cl. Const'iple, Jan. 28
BALAKANI	Port Arthur (Texas)	Manchester	L. Jan. 24
BATOUM	Philadelphia	London	Arr. Feb. 4
BAYONNE	Venice	New York	P. Sagres, Jan. 27
BEACON LIGHT	Philadelphia	Lisbon	Arr. Feb. 2
BEME	Bombay	Rangoon	L. Jan. 6
BLOOMFIELD	Tyne	New York	L. Jan. 24
BORJOM	Batoum	Alexandria	L. Constanti'ple, Feb. 1
BRILLIANT	New York	Hamburg	L. Feb. 4
BROADMAYNE	Manchester	Kustendje	L. Liverpool, Feb. 6
BULLMOUTH	Palembang	—	L. Feb. 2
BULYSSES	Amsterdam	Kustendje	P. Sagres, Jan. 30
BURGERMEISTER PETERSEN	Philadelphia	Swinemunde	L. Feb 4
CADAGUA	—	—	In port, Bilbao, Jan. 31
CALCUTTA (Br. bq.)	Newcastle (N.S.W)	SanFrancisco	L. Dec. 4
CARDIUM	Singapore	—	L. Jan. 23
CAUCASIAN	London	Philadelphia	Arr. Jan. 31
CHARLOIS	Antwerp	New York	Arr. Jan. 28
CHESAPEAKE	Manchester	Philadelphia	P. Fastnet, Jan. 29
CHESTER	Philadelphia	Antwerp	P. Del. Break, Jan. 23
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Kobe	—	L. Jan. 31
COL. E. L. DRAKE	New York	Galveston	L. Oct. 25
COWRIE	Cardiff	Singapore	At Malta, Feb. 5
CYMBELINE	Philadelphia	Avonmouth	L. Jan. 30
CZAR NICOLAI II.	Antwerp	Hamburg	Arr. Feb. 1
DAGHESTAN	Philadelphia	St. Louis	P. Dungeness, Feb. 3
DAKOTAH	SanFrancisco and Shanghai	Hong Kong	Arr. Jan. 5
DELAWARE	New York	Belfast	L. Jan. 26
DEUTSCHLAND	Hamburg	New York	Arr. Jan. 25
DIAMANT	Savona	Philadelphia	P. Gibraltar, Feb. 5
ELAX	Calcutta	Port Soesoe	Arr. Feb. 2
ELISE MARIE	New York	Swinemunde	L. Feb. 4
ENERGIE	Copenhagen	Tyne	Arr. Feb. 6
ERIVAN	Swansea	Port Arthur (Texas)	P. Lundy Is., Jan. 13
EUPLECTELA	Philadelphia	Hamburg	Arr. Feb. 7
EXCELSIOR	Port Talbot	New York	Arr. Feb. 2
EZIO	—	—	Coasting Peru
FRANCE MARIE	Marcus Hook	Barcelona	Arr. Dec. 6
GEESTEMUNDE	Philadelphia	Christiania	P. Del. Break., Jan. 25
GENESSE	Philadelphia	Liverpool	P. Del. Break., Jan. 25
GEORGIAN PRINCE	Tyne	New York	L. Jan. 30
GOLDMOUTH	Soesoe	—	P. Las Palmas, Feb. 2
GRAF STROGANOF	Cronstadt	Odessa	In Tyne, Jan. 10
GUT HEIL	Pillau	Havana	Arr. Jan. 19
HAINAUT (Dch. shp.)	Smyrna	Antwerp	L. Feb. 3
HARRY WADSWORTH	Middlesboro'	Port Arthur (Texas)	Arr. Feb 4
HELIOS	Smyrna	Fiume	Arr. Feb. 3
HOTHAM NEWTON	Middlesbro'	New York	P. Scilly, Jan. 31
HOUSATONIC	Bombay	Newcastle (N.S.W.)	Arr. Jan. 16
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Piræus	Novorossisk	Arr. Jan. 25
J. B. AUG. KESSLER	Philadelphia	Galveston	P. Del. Break, Jan. 24
JAMES BRAND	Tyne	Port Arthur (Texas)	L. Jan. 16
KURA	Avonmouth	Penarth	Arr. Feb. 6
LA CAMPINE	Antwerp	New York	Arr. Feb. 2
LA FLANDRE	Philadelphia	Ghent	Arr Feb. 6
LA HESBAYE	New York	Antwerp	L. Feb. 1
LA MADALEINE	Cardiff	Marseilles	Arr. Jan. 16
LA VIGUESA	Marcus Hook	Vigo	Arr. Nov. 6
LACKAWANNA	New York & Thameshaven	London	Arr. Feb. 4
LE COQ	Port de Bouc	Philadelphia	P. Gibraltar, Feb. 5
LOUTSCH	Barcelona	Novorossisk	L. Const'n'ple, Sept. 5
LUCERNA	Manchester	Philadelphia	Arr. Feb. 6
LUCIFER	Newport	Nantucket	P. Old Head of Kinsale, Feb. 5
LUCIGEN	Port Talbot	Philadelphia	Arr. Jan. 28
LUCILINE	Cette	Philadelphia	Arr. Feb 5
LUMEN	Bergen	Tyne	Arr. Jan. 12
LUX	Philadelphia	Rouen	P. Havre, Feb. 5
MAKKAVEI	Batoum	Odessa	L. Jan. 13
MANHATTAN	New Orleans	Bremen	L. Port Eads, Jan. 23
MANNHEIM	Tyne	New York	Arr. Feb 2
MARGARETHA	London	Manzanilla	Off Barry Island, Feb. 1
MEXICAN PRINCE	Tyne	Cuba	P. Dungeness, Jan. 14
MIRA	Philadelphia	Havre	P. Del. Break., Jan. 26
MUREX	Soesoe	—	L. Feb. 5
NARRAGANSETT	New York	Flushing	L. Jan. 26
NERITE	Singapore	BalekPappan	Arr Jan. 17
NEW YORK	New York	Flushing	L. Feb. 3
OCEAN	Amsterdam	New York	Arr. Jan. 29
ORANJE PRINCE	Tyne	Cuba	L. Jan. 28
ORIFLAMME	Marcus Hook	Rouen	L. Jan. 26
OSCEOLA	Tyne	New York	L. Jan. 23
OTTAWA	Marcus Hook	Tampico	L Galveston, Jan. 17
OURAL	Tyne	Port Arthur (Texas)	Arr. Jan. 26
PALEMBANG	Pulo Samboe	Singapore	Arr. Dec. 18
PAULA	New York	Dantzig	L. Jan. 26
PECTAN	Port Arthur (Texas)	—	L. Feb. 3
PENNOIL	Philadelphia	Rotterdam	Arr. Jan. 20
PERLAK	Samboe	Singapore	Arr. Dec. 27
PETROLEUM	—	Gibraltar	Arr. Dec. 18
PHOEBUS	New York	Hamburg	L. Jan. 29
PINNA	Philadelphia	—	L Jan. 29
POTOMAC	Liverpool	Philadelphia	Arr. Jan. 26
PROMETHEUS	Adelaide	London	L. Feb. 3
PRUDENTIA	Rouen	Port Talbot	Arr. Jan. 21
RION	Hull	Tyne	Arr. Feb. 4
ROCK LIGHT	Port Arthur (Texas)	—	L. Newport News, Feb. 6
ROSSIJA	Novorossisk	Hamburg	Arr. Feb. 6
ROTTERDAM	Rotterdam	—	L. Jan. 31
RUSSIAN PRINCE	Havana	New York	L. Feb. 5
SALAHADJI	Newchang	Singapore	Arr. Dec. 18

Vessel.	From.	For.	Latest Date and Position.
SEMINOLE	Philadelphia	Calcutta	Arr. about Feb. 7
SILVERLIP	Hamburg	Tyne	Arr. Feb. 2
SINGU	Rangoon	Bombay	L. Jan. 12
SNOWFLAKE	Penarth	Philadelphia	P. Barry Island, Jan. 20
SOPHIE	Batoum and Trieste	Venice	Arr. Feb. 3
SPONDILUS	Cardiff	Singapore	L. Feb. 5
STANDARD	Hamburg	Philadelphia	Arr. Jan. 29
STROMBUS	Singapore	—	L. Jan. 14
SURAM	Batoum	Avonmouth	Arr. Feb. 5 and L. Feb. 7
SUWANEE	Philadelphia	Barrow and Belfast	At Barrow, Jan. 30
SVIET	Alexandria	Odessa	Arr. Dec. 17
TELENA	Cardiff	Singapore	Arr. about Feb. 1
TEREK	Manchester	Philadelphia	L. Liverpool, Feb. 5
TIFLIS	Tyne	Philadelphia	L. Jan. 25
TIOGA	Batoum	Liverpool	Arr. Nov. 25
TONAWANDA	Manchester	New York	Arr. Jan. 26
TROCAS	Nagasaki	Kobe	Arr. Feb. 5
TURBO	London	Port Arthur (Texas)	Arr. Jan. 28 and L. Jan. 30
TUSCARORA	Calcutta and Boston	New York	Arr. Feb. 2
TWINGONE	Rangoon	Madras	L. Jan. 12
VEDRA	Algiers	—	P. Gibraltar, Jan. 28
VILLE DE DIEPPE	Philadelphia	Rouen	L. Feb. 5
VILLE DE DOUAI	Calais	Dunkirk	Arr. about Feb. 1
VOLUTE	BalekPappan	—	L. Feb. 5
WEEHAWKEN	London	Sumatra	At Colombo, Feb. 2
WILLKOMMEN	Bremen	New York	L. Tyne, Jan. 24
WINNEBAGO (Late KINSMAN)	Shanghai	Bombay	Arr. Jan. 26

The American Oil Market.

Owing to the non-arrival of the American mail, this week's oil market is unavoidably held over. This also explains the absence of various American statistics from our columns this week.

◆

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

February 9th, 1906.

A reduction of an ⅛d. (one-eighth) has again been made in the price of petroleum during the week, the latest quotations being for Russian 5¼d.; American, 6⅛d.; Water White, 7½d.; Roumanian, 5¼d.

LUBRICATING OILS

are unchanged as follows:—

American pale, £7 5s. to £8 15s.
American dark cylinder, from £7 10s.
American filtered cylinder, from £10 12s. 6d.
Shellene, £5.

TURPENTINE.

American turpentine has been dull and fluctuating considerably, having been below 47s., but towards the end of the week it is considerably firmer, and is now quoted for Spot and up to the end of June at 47s. 6d.

LIVERPOOL OIL MARKET

February 8th.

Refined oils are very quiet, but sellers now quote 6¾d. for Russian and 7½d. to 8¾d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, February 8th.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, February 8th.

Standard White is quoted at 7·55.

RUSSIA.

Baku, February 6th.

The petroleum market is firm. There are more buyers, but few sellers. Crude is now quoted, spot, 23½ copecs; future, 23-24⅝ copecs.

BELGIUM.

Antwerp, January 31st.

The petroleum market is quiet. Price of Standard White, spot, 19½ francs per 100 kilos; February, 19¾ francs; March-April, 20 francs.

GERMANY.

Hamburg, February 3rd.

The kerosene market is weak. The price of American Standard White is 7·10 marks per 50 kilos.

ROUMANIA.

February 2nd.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	3·35-3·40
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery	3·00- —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octroi tax of 12 fcs. per 100 kilos.

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
,, sp. gr. 0·720-0·725	8·00- 9·00
,, sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

Bombay, January 20th.

There has been no advance in prices of Burma oils since our last report, but the tendency is firmer.

American, "Snowflake," 150 deg.	Rs. 6	0	2
,, Chester, 125 deg.	4	8	2
,, Monkey Brand, 125 deg.	4	2	2
Russian, "Anchor," 125 deg.	4	14	6
,, "White Camelia" brand, 125 deg.	4	0	2
,, "Rising Sun," bulk, in local made tins	3	14	0
,, "Elephant" brand, in local made tins	3	10	0
,, Bulk, in Bombay Bazaar, 125 deg. per 10 gallons	3	3	0
Borneo oil in bulk	2	14	6
Burma Oil, in bulk, per 8 imperial gallons	2	11	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by . . . the Custom House.

FOR THE WEEK ENDED FEBRUARY 6th, 1906.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Jan. 31	London	Consolidated Petroleum Co.	Batoum	Bulk	Gas	700,000	Philadelphia
,, 31	,,	Anglo-American Oil Co	,,	Bulk	,,	610,630	,,
,, 31	,,	,,	Minnesota	550 brls.	Lub.	22,000	,,
,, 31	,,	,,	Lackawanna	Bulk	Lamp	669,330	New York
Feb. 1	,,	,,	Gordon Castle	500 brls.	M.Colza	20,000	Philadelphia
,, 1	,,	,,	,,	2630 brls.	Lub.	105,200	,,
,, 1	,,	Schliemann's Oil Co.	,,	60 brls.	,,	2,400	,,
,, 1	,,	A. Brown and Co.	Tampicon	60 brls.	,,	2,400	,,
,, 1	,,	London and India Dock Co.	Olivia	50 brls.	,,	2,000	Hamburg
,, 2	,,	Mordaunt Bros.	Tampicon	549 brls.	,,	21,950	Philadelphia
,, 3	,,	Scott's Wharf	Maine	100 brls.	,,	5,000	New York
,, 3	,,	G. W. Sheldon and Co.	,,	122 pks.	,,	1,190	,,
,, 3	,,	Mercantile Lighterage Co.	Minnehaha	180 brls.	,,	7,200	,,
,, 5	,,	G. and H. Green	Maine	85 brls.	,,	3,000	,,
,, 5	,,	London and India Docks Co.	,,	120 brls.	,,	4,800	,,
,, 5	,,	London Oil Storage Co.	Cressida	26 pks.	,,	100	Hamburg
,, 5	,,	A. Brown and Co.	Plover	440 brls.	,,	17,400	,,
,, 5	,,	Burt, Boulton and Haywood	Alchymist	Tanks	Creosote	90,000	Salzeate
,, 5	,,	Ragosine and Co.	Tampicon	100 brls.	Lub.	4,070	Philadelphia
,, 5	,,	W. Balchin	,,	450 brls.	,,	18,000	,,
,, 5	,,	London Oil Storage Co.	Cressida	39 casks	,,	1,550	Hamburg
,, 5	,,	G. W. Sheldon and Co.	Minnetonka	75 pks.	Lub, Gr.	840	New York
,, 6	,,	Anglo-American Oil Co.	Maine	649 brls.	Lub,	25,960	,,
,, 6	,,	Grindley and Co.	Tampicon	200 brls.	,,	8,000	Philadelphia
,, 6	,,	J. W. Baker	,,	120 bls.	,,	5,810	,,
,, 6	,,	Mordaunt Bros.	East Point	60 brls.	,,	2,500	,,
,, 6	,,	T. H. Lee	Plover	47 cases	,,	2,720	Hamburg
,, 1	Liverpool	A. B. Fleming	Iceland	100 brls.	M. Lub.	4,500	,,
,, 2	,,	Meade-King, Robinson and Co.	Rowanmore	1183 brls.	,,	47,320	Baltimore
,, 2	,,	A. Hopps and Sons	Numidian	250 brls.	Resid.	10,000	S.John,N.B.
,, 5	,,	,,	Noordland	250 brls.	M. Lub.	10,680	Philadelphia
,, 5	,,	Worthington and Boler	,,	40 brls.	,,	1,600	,,
,, 5	,,	Crew, Levick Co.	,,	1290 pks.	,,	53,230	,,
,, 5	,,	Meade-King, Robinson and Co.	,,	2487 brls.	,,	99,480	,,
,, 5	,,	W. B. Dick and Co.	,,	295 brls.	,,	11,950	,,
,, 5	,,	,,	Victorian	260 brls.	,,	10,830	New York
,, 5	,,	Cunard Steam Shipping Co.	Umbric	50 brls.	,,	2,000	,,
,, 5	,,	Harrison and Co.	Rutland	300 brls.	,,	12,000	Hamburg
,, 6	,,	Bramwell, Fern and Co.	Rowanmore	20 brls	Lub. Comp.	930	Baltimore
,, 6	,,	Crew, Levick Co.	Noordland	100 br s	M.Lub.	4,610	Philadelphia
,, 6	,,	D. Owen and Sons	,,	450 brls.	,,	23,680	,,
,, 6	,,	Meade-King, Robinson and Co.	,,	140 brls.	,,	5,600	,,
,, 6	,,	G. B. Taylor	Victorian	2345 brls.	,,	93,800	New York
,, 1	Barrow	Anglo-American Oil Co.	Suwanee	Bulk	Lamp	577,330	Philadelphia
,, 1	,,	,,	,,	Bulk	Naph.	417,990	,,
Jan. 31	Bristol	Ferris and Co.	Kansas City	25 brls.	Lub. Gr.	900	New York

DIESEL OIL ENGINES.

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EXTREME SAFETY. SELF STARTING.
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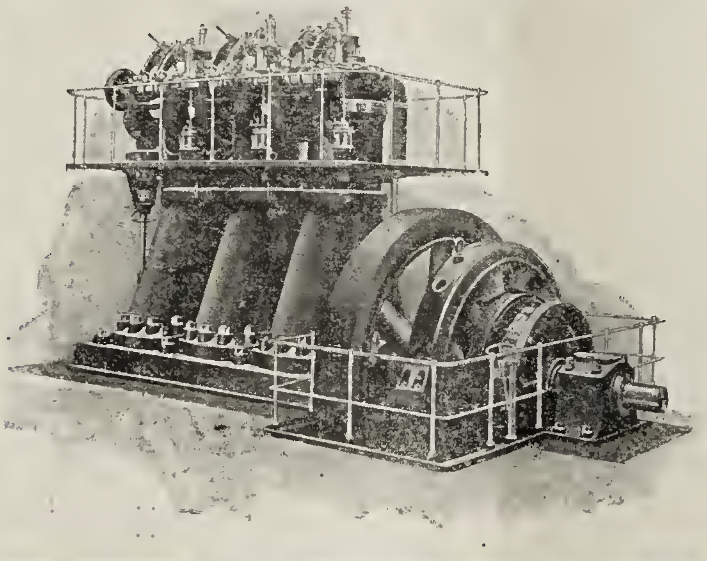

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PACKED IN SEALED TWO GALLON CANS.

Universally used by all leading Motor Manufacturers, Motorists, Railway and Motor Bus Companies.

IN USE AND FOR SALE EVERYWHERE.

QUALITY TELLS.

To Dealers only.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Feb. 3	Bristol	First Anglo-Russian Oil Co.	City of Liverpool	10 brls.	Lub.	430	Hamburg
,, 3	,,	E. Stock and Sons	,, ,,	25 brls.	,,	1,150	,,
,, 3	,,	Western Petroleum Oil Co.	Kura	Bulk	Lamp	453,750	Trieste
Jan. 31	Grimsby	J. Sutcliffe and Sons	Retford	33 pks.	Lub.	670	Antwerp
Feb. 3	Hartlepool	Hartlepool S'eam Navigation Co	Malta	20 brls.	,,	800	Hamburg
Jan. 31	Hull	W. Moran and Sons	Hidalgo	6 brls.	Lamp	250	Reval
,, 31	,,	T. Wilson, Sons, and Co.	Bruno	100 brls	Lub.	4,000	Hamburg
Feb. 1	,,	,,	Congo	104 brls.	,,	4,160	Trieste
,, 1	,,	,,	Colorado	76 brls.	,,	3,040	New York
,, 1	,,	W. Gillyott and Co.	,,	425 brls.	,,	17,000	,,
,, 2	,,	T. Wilson, Sons and Co.	Cito	15 pks.	,,	380	Hamburg
,, 3	,,	,,	Juno	14 brls.	,,	560	,,
,, 1	Manchester	Meade-King, Robinson and Co.	Man. Corporation	1691 brls.	,,	67,640	Philadeldhia
,, 1	,,	,,	,, ,,	500 brls.	Lamp	20,000	,,
,, 1	,,	Crew, Levick and Co.	,, ,,	1420 brls.	Lub.	59,730	,,
,, 1	,,	Liverpool Storage Co.	,, ,,	120 brls.	,,	5,050	,,
,, 1	,,	Diamond Lubricating Co.	,, ,,	60 brls.	,,	2,400	,,
,, 1	,,	W. Hodgson and Co.	,, ,,	120 brls.	,,	6,050	,,
,, 1	,,	G. B. Taylor	,, ,,	93 brls	,,	3,720	,,
,, 2	,,	A. Peplce	Holnis	25 brls.	,,	1,080	Hamburg
,, 2	,,	Donald Currie and Co.	,,	15 brls.	,,	620	,,
,, 2	,,	Colby and Co.	,,	25 brls.	,,	1,000	,,
,, 2	,,	Colledge, Roy and Co.	,,	75 brls.	,,	3,000	,,
,, 2	,,	Morton and Son	Fearless	10 brls	,,	400	,,
2	,,	Bramwell, Fern and Co.	Lestris	20 brls.	,,	920	Antwerp
,, 2	,,	Meade-King, Robinson and Co.	Broadmayne	Bulk	Gas	950,000	Philadelphia
,, 2	,,	Homelight Oil Co.	Terek	Bulk	Lamp	707,200	Batoum
,, 2	,,	Consolidated Petroleum Co.	,,	Bulk	,,	734,400	,,
,, 5	,,	W. Hodgson and Co.	Thespis	33 brls.	M.Lub.	1,220	New York
,, 5	,,	G. Fairclough	,,	31 brls.	,,	1,310	,,
,, 5	,,	G. B. Taylor	,,	2987 brls.	,,	119.480	,,
,, 6	,,	Bramwell, Fern, and Co.	,,	40 brls.	,,	1,650	,,
,, 6	,,	W. W. Jonas, Dooly and Co.	,,	50 brls	,,	2,000	,,
,, 1	Newcastle	Tyne-Tees Steam Shipping Co.	Grenadier	24 brls.	Tar oil	960	Rotterdam
,, 1	,,	,,	New Oporto	100 brls.	M.Lub.	4,000	Hamburg
,, 3	,,	,,	Juno	20 brls.	,,	800	Antwerp
,, 3	,,	Furness, Withy and Co.	Qneenborough	272 brls.	,,	10,830	ew York
,, 5	,,	C. Hassell and Son	,,	2718 brls.	,,	108,720	,,
,, 6	Shields, S.	Consolidated Petroleum Co.	Rion	Bulk	Lamp	271,000	Novorossisk
,, 1	Dundee	D. Alexander and Sons	Corsica	6 brls.	,,	240	Hamburg
,, 6	,,	,,	Cumherland	6 brls.	,,	240	,,
Jan. 31	Glasgow	Anchor Line	Furnessia	175 brls.	Min. Colz.	7,000	New York
Feb. 1	,,	J. and A. Allan	Buenos Ayrean	1480 brls.	Lub.	74,000	Philadelphia
,, 3	,,	Anchor Line	Caledonia	2282 brls.	,,	88,930	New York
,, 3	,,	,,	,,	225 brls.	Lamp	9,000	,,
Jan. 31	Grangemouth	Graham-Yooll and Co.	Coburg	100 brls.	,,	4,000	Hamburg
,, 31	,,	J. Currie and Co.	,,	230 brls.	Lub.	9,200	,,
Feb. 1	,,	,,	Scalpa	75 brls.	,,	3,000	,,
,, 1	,,	W. G. Yooll and Co.	,,	200 brls.	Lamp	8,000	,,
,, 1	Leith	,,	Weimar	50 brls.	,,	2,180	,,
,, 3	,,	Henderson and McIntosh	More	100 brls.	Lub.	4,000	Philadelphia
,, 1	Belfast	J. C. Pinkerton and Co.	City of Hamburg	14 brls.	,,	920	Antwerp
,, 2	,,	Consolidated Petroleum Co.	Kura	Bulk	Lamp	414,480	Trieste
,, 6	,,	G. Heyn and Sons	Blackhead	25 brls.	Lub.	1,000	Riga
					Net Total	7,940,100	
		Deduct to correct :—					
Jan. 1	London	Anglo-American Oil Co.	Burgermeister Petersen	Bulk	Gas	542,280	

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO FEBRUARY 3rd, 1906.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.
Austria ...	868,230	868,230	4,160	82,250	—	11,000	—	—	—	—	—	—	—	--	872,390	972,480
Belgium ...	—	240	3,310	45,350	—	11,000	—	—	—	1,620	—	—	—	406	3,310	47,616
Borneo ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Canada ...	—	—	—	—	10,000	20,000	—	—	—	—	—	—	—	—	10,000	20,000
Germany ...	14,660	665,580	69,890	273,260	—	—	—	—	—	2,320	—	—	—	4,980	84,550	956,140
Holland ...	—	—	—	—	—	—	—	—	—	773,600	—	98,200	960	7,080	960	878,880
Roumania ...	—	1,360,000	—	—	—	—	—	—	—	—	—	—	—	—	—	1,360,000
Russia ...	1,712,850	4,946,720	1,000	1,800	—	—	—	—	—	—	—	—	—	5,410	1,713,850	4,953,930
Sumatra, &c	—	—	—	—	—	—	—	—	—	930,000	—	—	—	—	—	930,000
U.S.A. ...	1,275,660	6,875,251	1,182,830	4,512,310	—	430,198	2,260,630	6,728,270	417,990	1,069,180	—	—	27,930	145,170	5,165,040	19,750,379
Other Countries	—	—	2,270	4,030	—	—	—	—	—	480	—	—	90,000	90,300	90,000	94,810
	3,871,400	14,716,021	1,261,190	4,919,000	10 000	472,198	2,260,630	6,728,270	417,990	2,777,200	—	98,200	118,890	253,346	7,940,100	29,964,235

The Klandyusz well at Boryslaw, which has been among the most productive wells in Palicia, has this month again increased its yield. The output which had declined to 200 tons, has now again risen to 300 tons daily. This is apparently the result of an operation by which a rock has been cut through, admitting of a larger flow of oil.

The Croatian Mining Co. has drilled 7 wells at Poganec near Prepavina station, between Krizevci and Koprivnica, of which six are yielding oil, although the deepest well is not more than 52 metres. The oil is of a greenish brown colour, and appears to be of good quality.

The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XIV. *(New Series.)* FEBRUARY 17TH, 1906. No. 363.

Editorial Notes.

Messrs. Funck's Petroleum Circular. The interesting circular issued by Messrs. Henry Funck and Co., detailing the shipments of refined petroleum to the United Kingdom in the past year will be found upon the next page. From our weekly classified list of petroleum imports and also from the several articles which appeared in the REVIEW shortly after the close of 1905, our readers will be familar with the shipments of the various refined products from the producing countries to the United Kingdom for the past year; but still, Messrs. Funck's circular is well worth perusal. Out of the total of 3,700,000 barrels of refined oils imported into this country during the past year, America supplied no less than 2,500,000 barrels, Russia coming second with 1,000,000 barrels, the Galician refined product occupying the third place with 130,000 barrels. The importation of refined oil to this country has considerably decreased of late, and last year's shipments were very much less than those of any of the past six years; in fact, our imports of refined oil for several years exceeded 4,000,000 barrels per annum. It was not until five years ago that the Roumanian oil figured in Messrs. Funck's annual statement, on which occasion the imports from that country were 50,000 barrels. Although Galicia exported to this country last year double the quantity of refined oil than Roumania, those consignments formed practically the first we have received from that country. With regard to America, the exports of refined oil to this country reached their highest point in 1896, when the figures stood at about 3,000,000 barrels, while Russia's highest was reached two years ago when she exported to this country 2,200,000 barrels. The figures of the total imports certainly do suggest that there is some truth in the statement we frequently hear that the demand for refined oils in this country is moving in a retrograde direction.

The Baku Oil Market. A change has come over the Baku oil market. The energetic manner in which the work of restoring the oil fields is proceeding and the signs of a general calming down, as well as the appearance of buyers, have all contributed to bring about greater animation on the market, and prices are rapidly rising. Crude oil has gone up to 23½-24 copecs, and residuals are now quoted 27 copecs spot. Buyers of kerosene in waggons are willing to pay 25 copecs per pood, but even at this price there are no sellers. The usual credit deals are now unknown, as buyers in many cases demand payment in advance. The enhanced price of residuals shews that the need in this product is very great, but relative valuation of the different products is bound to change as soon as the export trade returns to its normal condition. Enquiries from foreign buyers are already coming in, but owing to the difficulties which still hamper operations at Batoum, shipments are now proceeding *via* Novorossisk. The question of the export trade is now on the tapis. For its successful solution there will have to be a substantial reduction in the rate on the Transcaucasian railway, otherwise the falling off in traffic will seriously diminish the revenue of the railway.

America's Paraffin Wax Exports. There can be no two opinions about it that the paraffin wax export trade of America is declining. There has been evidence of this in the exports for the past few years, and in the statistics just published of the quantities exported during 1905, there is plenty of confirmation to be found. If we take the average monthly shipments, we find that 13,000,000 pounds of paraffin wax have been exported during each month of the past year, while for 1904 the monthly average was over 14,000,000 pounds. If we go back to the figures of 1903 an even greater decline will be noticed, for during that year the monthly average was 17,000,000 pounds. In round figures, the exports of America's paraffin wax during 1903 equalled 204,000,000 pounds; for 1904 they were 174,000,000 pounds; while for last year they had dropped to 160,000,000 pounds. The decrease in these exports is mainly accounted for by the fact that European couutries have drawn supplies from other countries, notably from Austria-Hungary.

January in the American Oil Fields. The year 1906 has had a bad beginning so far as operations are concerned in the American oil fields. January witnessed a general decline both in wells completed, new production, and new operations—in fact, the new production was the smallest recorded for many years. Commenting upon the January statistics, the *Oil City Derrick* remarks that there seems to be no prospect in a break in the general monotony that has prevailed throughout the fields for the past few months. There is absolutely no territory of a first-class order in sight; and, consequently, developments are confined for the most part to old territory that was passed by in the days when wells doing only several barrels per day were regarded as of little consequence. West Virginia has indeed a very sorry record for January, for of the 113 wells completed, about 33 per cent. were either dusters or gassers, while the productive wells only averaged about twelve barrels each. This is the smallest average ever known since the field came into prominence as a factor in oil production. In all the districts producing high grade oil, about 100 fewer wells were completed during the month than in December, and the new production declined no less than 700 barrels. The average yield of the new wells was under seven barrels, this figure being the lowest ever recorded, and clearly illustrating the value of the territory now being drilled. In Kentucky and

Tennessee, the Trenton Rock fields and Indiana, operations for January were all on the decline, and the whole oil field work for the month has been productive of anything but encouraging results. A few details will be found upon another page of this issue.

EXPORTS FROM AUSTRIA-HUNGARY.

The exports of petroleum products from Austria-Hungary in 1905 amounted to 207,729 tons, of a value of 17,063,554 kronen against 136,124 tons, of a value of 11,972,000 kronen in the preceding year. The detailed figures are given below (in tons):—

	1905.	1904.
Crude Oil	1,052	2,341
Illuminating Oil ..	161,714	91,500
Lubricating Oil ..	37,677	28,527
Benzine	8,185	13,706

With the reduced railway tariffs which will come into force shortly it is expected that the export to Germany would increase considerably, as in addition to the waterways the railways could also be made use of to a larger extent by the petroleum export trade.

LATEST DETAILS FROM THE HUMBLE OIL FIELD.

(From yesterday's American mail.)

The Transatlantic mails which we have just received upon our going to press give a number of late details concerning operations in the Humble field. In spite of active drilling in the territory, the production continues with marked monotony to decrease, the daily average for the month being only 13,500 barrels, as against 20,000 barrels at the latter end of the past year. During January the new wells brought in an approximate production of 2,000 barrels daily, consequently the older wells are falling off in their yield to a most alarming extent. Apart from the natural decline of the older producers, salt water is playing havoc upon some plots, and a few wells have ceased altogether owing to this cause. The new wells brought in during the month have not been so great in number as they were during December, but at the close of the month considerably more were being drilled. One hundred wells were producing in the field at the beginning of February, and operations were being carried on as usual, the strike of workers, to which reference is made elsewhere, having been amicably settled. An effort is now being made to extend the present limits of the field, and with some success.

LONDON OIL SHARE MARKET.

Friday, Feb. 16th.

Business was very quiet during the early part of the week in the Oil Share group of the Stock Exchange, but towards its close dealing has been much more active, although some irregularity prevails. Shell Transport Ordinary has received first attention, transactions resulting in a decided improvement of 1s. 3d. in the price at 23s. 3d. to 23s. 9d., while Californian Oilfields have also been in request, and shew an advance of ¼ on balance at 6½-6¾. On the other hand, Schibaieffs have proved a somewhat weak spot, the Ordinary losing 6d. at 10s. 3d. to 10s. 9d., and the Preference ¼ at 3⅜-3⅝.

To revert to Saturday last:—Anglo-Russians stood 1/16-⅛, Assam Oil ⅝-⅞, Baku Ordinary 3s. 9d. to 4s. 3d., Preference 6s. 9d. to 7s. 3d., Bibi-Eybats ½-⅝, Debentures 88-93, Californian Oilfields 6¼-6½, European Preferences 3/16-5/16, Debentures 82-87, Russian Ordinary 14s. 6d. to 15s. 6d., Preference 13s. 6d. to 14s. 6d., Debentures 90-93, Spies ⅜-7/16, Schibaieff Ordinary 10s. 9d. to 11s. 3d., Preferences 3⅝-3⅞, Shell Transport Ordinary 22s. to 22s. 6d., and Preference 9-9½.

On Monday there was a fall of ¼ in Schibaieff Preference at 3⅜-3⅝, and on Thursday the Ordinary were 6d. lower at 10s. 3d. to 10s. 9d., although in other directions the market was strong, Shell Transports being in good request at 23s. 3d. to 23s. 9d., and Californian Oilfields ¼ better at 6½-6¾. Latest prices are given on page 128.

INDIA DESIRES BORNEO SPIRIT.

An Indian journal dwells upon the recent arrival at Philadelphia of a tank ship from Borneo containing 1,250,000 gallons of benzine (petroleum spirit) for the American markets, and asks, if Borneo can afford to ship petroleum in any form to America, the freight to India should be so low as to give the former country full control of the Indian market. Freight per unit between Borneo and Calcutta is estimated at about 2½ annas per unit, while from Batoum it is about 10 annas. Again, refined Borneo oil is estimated at from Rs. 11-4-0 to 13-8-0 per ton, whereas the freight on Baku oil to Batoum is Rs. 20-14-0 before shipment. It is likely, therefore, continues the journal, that the Russian oil now sent to the Far East will have to find another market, and that a reduction of refined oil will cause a great increase in its use for industrial purposes.

REFINED OIL SHIPMENTS TO THE UNITED KINGDOM DURING 1905.

Messrs. Henry Funck and Co.'s circular of shipments of refined petroleum oil from America (including Texas), Russia, Roumania and Galicia to the United Kingdom during the year 1905 gives the following figures:—

Ports.	American. Barrels.	Russian. Barrels.	Roumanian. Barrels.	Galician. Barrels.	Total. Barrels.
Barrow ..	6,617	—	—	—	6,617
Belfast ..	66,526	95,279	—	—	161,805
Bristol and Avonmouth	283,799	23,110	—	—	306,909
Cardiff ..	—	81,743	—	—	81,743
Dublin ..	144,292	—	—	—	144,292
Hull ..	178,853	95,589	—	26,050	300,492
Limerick	—	35,100	—	—	35,100
Liverpool and Birkenhead	224,515	43,801	—	31,450	299,766
London ..	1,012,273	397,570	66,800	58,590	1,535,233
Manchester	241,360	271,904	—	—	513,264
Plymouth	48,940	—	—	—	48,940
Shields ..	55,550	39,822	—	5,580	100,952
Southampton	111,363	6,300	—	9,799	127,462
Sunderland	104,850	—	—	—	104,850
(Exclusive of Shipments of Oil in Barrels by general cargo steamers.)	2,478,938	1,090,218	66,800	131,469	3,767,425

The Baku Russian Petroleum Co., Ltd.

REPORT OF THE INVESTIGATION COMMITTEE.

During the early part of the week the shareholders in the Baku Russian Petroleum Co. have received a circular issued by the Chairman—Col. Ivor Philipps, M.P.—which embodies the report of the Investigation Sub-Committee, which has already been approved by the committee of large shareholders. The report, which is signed by Mr. Alfred H. Drew, the Chairman of the Sub-Committee, opens by giving the names of the members who, in addition to the Chairman, comprised the Committee. They are as follows:—Messrs. J. S. Austen, W. Bingham, Col. T. W. Harding, Messrs. Charles Lock, J. Compton Rickett, and John Young. The Sub-Committee held 16 meetings in all, but out of this number, owing to the demands of the General Election, Mr. J. Compton Rickett was only able to attend two meetings. He has, however, been represented at the Committee, and the report states that he sees no reason to dissent from the general conclusions.

The report of the Sub-Committee then goes on to state;—

The Chairman of the company, Col. Ivor Philipps, M.P., the general manager, Mr. Leslie Urquhart, Mr. Geo. Tweedy, Mr. P. Dvorkovitz, Mr. H. N. Gladstone (director), and Mr. C. F. H. Leslie (director), appeared separately before the Sub-Committee and gave very full information with regard to all the matters of enquiry, and all the books and papers of the company were placed at the disposal of the Sub-Committee.

The Sub-Committee has held an exhaustive enquiry into all the questions raised by Mr. Dvorkovitz. They do not consider that is desirable to go into full details in this report, but trust that the Committee will accept their assurance that their findings have been arrived at after carefully weighing all that has been put before them.

1. Promotion.—The actual sum paid to the vendors in Russia for the purchase of the property appears to have been £848,000, to which must be added expenditure for underwriting, experts' fees, advertising, etc., amounting to £80,000, which left a gross promotion profit of about £334,000. Out of this sum a commission of £48,000 was divided between Mr. G. Tweedy and his associates, and £43,000 was paid as remuneration to the syndicate managers, leaving a sum of £243,000, which was the actual profit divided among the shareholders of the promoting syndicate, as to £28,000 in cash and as to £215,000 in shares.

Messrs. Ogilvy, Gillanders and Co. were interested in these profits to the extent of about one-third, amounting to £82,000, in addition to which they received £21,500, being their share of the £43,000 above mentioned, making a total of £103,500, of which the Sub-Committee is informed £12,168 was paid in cash and the balance in shares. Out of the above sum of £103,500, shares and cash amounting to £8,298 were distributed among certain sub-participants.

The share of profits received by Mr. H. N. Gladstone (director) is included in the amount received by his firm, Messrs. Ogilvy, Gillanders and Co.

The only other original director still on the board, viz., Mr. C. H. Moore, received out of the promotion profits about £650 in cash and 4,850 shares.

Mr. Gladstone and his firm now hold 56,209 shares, either in their own names or in the names of nominees, and Mr. C. H. Moore is the registered holder of 2,743 shares.

Mr. Dvorkovitz concluded from an inspection of the register at Somerset House on August 25th, 1898, that the directors had sold a large number of the shares which he supposed had then already been allotted to them as vendors. At that date, however, the vendors' shares had not been allotted, so that the shares which he assumed had been disposed of by the directors had not yet come into their possession.

2. Working Capital.—£50,000 working capital only was provided at the commencement, which was wholly inadequate. Although £100,000 further capital was issued in 1900, and various methods for raising more were resorted to from time to time, the operations of the company have been so unfortunate that the amounts provided have been insufficient to meet the situation.

3. Sale of Refineries.—The company had not sufficient capital to carry on a refining as well as a producing business, and accordingly the sale of the refineries was probably unavoidable.

4. Enterprises.—The various enterprises in which the company participated, viz.:—

(*a*) The formation of the Eastern Oil Association,
(*b*) The contract with the Kerosene and Lubricating Oil Co.,
(*c*) The joint working arrangement with the Russian Petroleum and Liquid Fuel Co., Ltd.,

were all entered into by the board, with the view to the more satisfactory marketing of the company's production, and however unsuccessful their result, the Sub-Committee are satisfied that the contracts were honest attempts to obtain a better price for the company's oil, but they consider the surrender to the Russian Petroleum Company under contract (*c*) of the entire control of the disposal of a large proportion of the company's output was a serious error. Fortunately the board has recovered its freedom of action.

5. Commissions earned by Ogilvy, Gillanders and Co.—In view of the fact explained by Mr. Gladstone, that his firm acted largely as managing agents, the Sub-Committee do not think that the amounts paid were, under the circumstances, unreasonable so far as regards contracts (*a*) and (*b*) referred to in clause 4.

With regard to contract (*c*) the entire control of the sales and of the commissions to be paid was in the hands of the Russian Petroleum Co., and the directors of the Baku Russian Co. had no voice in the management. A commission of 2½ per cent. was paid to Messrs. Ogilvy, Gillanders and Co. in respect of the greater part of the oil exported from Russia under this contract; the rate of commission was, towards the end of the contract, reduced.

Since the termination of the contract (*c*) the company's oil has been sold at Baku in the crude state, and only small brokerages, if any, are paid at Baku.

6. Directors.—The Sub-Committee has been unable to find any evidence to lead them to believe that any director has left the board, or that any new director has been placed on the board, through the influence of Mr. H. N. Gladstone.

The Sub-Committee finds that Mr. Dvorkovitz's allegations that Mr. Gladstone used his position on the board improperly to promote his personal interests are wholly unjustified.

Fees for the year 1905 were drawn by the directors at the full rate of £4,000 per annum for the first three quarters ended September 30th, but the Committee are pleased to report that the board at the end of the year passed the following resolution :—

> "That owing to the unsatisfactory state of affairs in Russia, and the present position of the company, the board draw no further fees for the year 1905, and that until the position of the company improves, fees at the following rates only be drawn, viz.:—Chairman, £500 per annum; directors, £250 per annum each."

7. Management of the Company.—The Sub-Committee is satisfied that the board considered it in the best interests of the company to enter into the agreement with Wm. France, Fenwick and Co., Ltd., and no doubt that firm has rendered considerable service to the company.

When the business has resumed its normal condition, the Sub-Committee thinks that the attention of the board should be directed to placing the management, both in London and Baku, permanently on a more economical and independent basis.

8. General Remarks.—At the time of the flotation of the company, the management of Russian oil properties was little understood in London, and the misfortunes of the company seem to have been largely due to the attempt to handle a new business, and to direct distant and complex operations, without adequate knowledge, with insufficient working capital, and with working expenses based upon the hopes of large profits which have never been earned.

It must also not be forgotten that during the years 1901 and 1902 the selling price of oil was very low, that as oil as sought at lower levels the working expenses necessarily increase, and that the disastrous strikes and political disorders have been adverse influences which could not be forseen.

The necessity for placing the company on a better financial basis is urgent, but in the present abnormal condition of the Caucasus, it is difficult to deal with the reorganisation of the capital. The Sub Committee, however, think that they should be re-appointed to confer with the directors upon this subject, and the financial arrangements which are necessary at the moment and for the provision of future working capital.

The Sub-Committee are pleased to report that there is a consensus of evidence to the effect that the company still possesses valuable oil-bearing properties.

A POINTED REPLY BY DR. P. DVORKOVITZ.

The circular which contained the above report was followed up by a reply sent to the shareholders by Dr. P. Dvorkovitz. This reply was as under :—

Dear Sir (or Madam),—I have just received the circular issued by your company, and, in haste, would draw your attention to a few salient points raised in the report of the Sub-Committee, who have been carrying out an investigation into the management of your company.

I do so in the hope that you may know the exact state of affairs, and that you will give me your support in order that the company may be placed upon a profit paying basis, and thus yield you a return which you have a right to expect.

The Sub-Committee's report, though throwing some light upon certain transactions, manages in the main to exclude that information which is of the utmost importance to the shareholders to know :—

The circumstances attending the formation of the company.
The subsequent carrying on of its business, and
The relation of the directors in regard thereto.

These matters are, of course, touched upon, but only in a most cursory manner; in fact, the omissions go very far to suggest the necessity of carrying the investigation further, and placing the conduct of the concern in the hands of a new board of management.

You will, by reading "through the lines," be able to form an opinion as to what has been left unsaid. The whole of my allegations against the attitude of certain directors, and the management of the company, are practically confirmed by the report, for the Committee's silence on some of them cannot be taken otherwise.

In regard to the promotion of the company, the Sub-Committee actually admits that the profit (gross) came to over £400,000, of which amount Mr. Gladstone's firm received considerably over £100,000; and this included shares to the extent of about 90,000. Of this number, I presume nearly the half were disposed of 56,000 shares are opportunity, for at the present time at the first available held.

In his speech to the shareholders, Mr. Gladstone explained that he was one of 38 members of the syndicate who formed your company, and had no part in the management of it. At all events he appears to have been a power on that occasion, for out of the £43,000 paid to the managers of the promoting syndicate "by way of remuneration," no less than £21,500—exactly one-half—found its way to Mr. Gladstone's firm. In regard to the formation, you will remember that my contention was that the promoters received "excessive profits," and though the Committee had a direct mandate to inquire if this was so, they discreetly hold their tongue, venturing no opinion whatever.

As to the working capital, the Sub-Committee entirely concur in my opinion that it was "wholly inadequate," and as a result of this, the company has had to sell its refineries, a move which, the Sub-Committee add, "was probably unavoidable."

The statement of the commissions earned by Mr. Gladstone's firm in connection with various contracts entered into, is amazingly vague. My argument was convincing enough—why did your company pay that firm 2½ per cent. commission on the oil, when everyone else carries out the same work for ½ per cent., and also why did they receive 5 per cent. for chartering steamers, when the recognised rate is one-third of that amount.

The least the shareholders had a right to expect was to be either told that my statement was entirely false, or that some explanation should be forthcoming as to this mysterious manipulation of funds into one channel. The Sub-Committee offer not the slightest explanation, but simply put forward a pious opinion that "under the circumstances" they do not think the amounts unreasonable. But why? Surely this is not adequate explanation for an arrangement which has cost the shareholders some tens of thousands of pounds.

Not only do the members of the Sub-Committee treat the joint working arrangement with the Russian Petroleum and Liquid Fuel Co. in a most summary fashion, but they go far out of their way to mislead you, inasmuch as they state that your directors had no voice in the management of the Russian Petroleum Co. As a matter of fact five of your directors—Sir James Kitson, Mr. H. N. Gladstone, Mr. C. H. Moore, Mr. C. H. Verner, and the Hon. Evelyn Hubbard, were at that time directors of the Russian Petroleum and Liquid Fuel Co., and so to contend that your board had "no voice" is, of course, little less than an absurdity.

The Committee, however, are outspoken in a few matters. They admit that the management should be placed upon a "more economical and independent basis."

Until I commenced my agitation, the directors were being paid at the rate of £4,000 per annum, plus £1,500 to Mr. Leslie's firm, although the shareholders for years received no dividend at all, but now they have decided to take only one-half.

The Committee also concur in my statement that not only are your properties valuable, but that the non-success of the concern has been due to the handling of a business "without adequate knowledge."

But all the criticism in the world will be unavailing to bring dividends to you. A new start must be made with a clean sheet, and I am convinced that if you only cast your voice in favour of a total change in the management, both in the oil fields and in London, then the future is exceedingly bright, and the time will most assuredly come—and that quickly—when handsome returns will be received which will enable the payment of dividends such as may make up for lost time.

In view of this, I respectfully ask you to be good enough to let me have your proxy by return of post (for Saturday next is the latest day for me to present them), in order that the position of your company may be retrieved, and, in anticipation, I beg to thank you.

Yours faithfully,
P. Dvorkovitz.

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AMERICA'S DECEMBER PARAFFIN WAX EXPORTS.

In the following table is given the amount of paraffin that was exported to America to each country during the month of December, the quantities being in pounds:

Exported to—	1905.
United Kingdom	9,943,482
Belgium	148,695
France	63,159
Germany	1,260,506
Italy	660,156
Netherlands	1,284,281
Other European Countries	525,064
British North America	5,897
Central America and British Honduras	55,600
Mexico	1,060,399
West Indies and Bermuda	840
Brazil	14,909
Chili	—
Other South American Countries	17,000
Japan	818,431
British Australia	—
Other Asia and Oceanica	46,331
British Africa	77,831
Other African Countries	—
Total, pounds	15,982,581

RUSSIAN NOTES.

A Regrettable Move.—It is reported that certain firms at Baku, owing to the continued labour troubles there, are closing their refineries.

Baku Stocks.—The stock of kerosene at Baku on the 21st of January (o.s.) amounted to only 7,000,000 poods against 26,000,000 poods on the same day last year.

The Producers' Loan.—At the Treasury Office at Baku, credit has been opened for the full sum of 2,200,000 roubles of the advances already granted to petroleum producers.

Sale of Residuals.—Messrs. Zacharoff and Skrepinsky have sold to the Central Asian Railway 1,000,000 poods of residuals for delivery in February and March, at the price of 30¼ copecs per pood.

Messrs. Mantascheff have recently forwarded two cargoes of kerosene of about 300,000 poods to Alexandria, where they will be packed in tins at their own case factory for distribution in the country.

A Probable Reduction.—Wholesale discharges of employés and permanent workmen by the bulk oil exporters at Batoum point to a probable great reduction in the petroleum export trade in the current year.

All Quiet at Baku.—The Governor-General of Baku reported to the Viceroy of the Caucasus, on the 9th of February, that for the preceding few days absolute quiet had reigned in the towns and at the oil fields; work was proceeding everywhere, with but few exceptions.

An Important Proposal.—At a meeting of owners of steamers plying on the Caspian Sea, recently held at Baku, a scheme was considered for forming a limited liability company to control all the Caspian shipping industry. It was proposed by Mr. Tagieff, but was opposed by such important shipowners as Dadasheff, Ashuroff and others. The scheme will probably fall through.

The Baku Market.—The tone of the Baku market remains firm, while prices are going up steadily. The latest quotation for crude oil is 24 copecs, and for residuals 27 copecs. The brisk demand which has now set in cannot be satisfied, as the output of crude oil is still insufficient, and the stocks of oils at the refineries are very small. There is consequently bound to come a shrinkage in the volume of the trade, more particularly in the shipments of residuals.

The Proposed New Excise Duty.—The Baku Exchange Committee propose to renew their representations to the Government not to introduce the excise duties on lubricating, solar, and other oils which are to come into force shortly. The reasons are—the practical impossibility of determining the nature of the oils without a complicated process involving many days' delay to steamers; and, on the other hand, the gain to the treasury would be small, as the consumption of machine oils would decline and the shipments of solar oil would cease entirely, since for the latter the proposed excise duty would be equivalent to entire prohibition.

A Conference of Baku Producers.—A conference of petroleum producers is proposed to be held at Baku in the early part of next month. The questions to be considered are:—The voting of money for organising the protection of the oil fields; the establishment of workmen's settlements; to raise the levy for maintaining the tank waggon allotment committee from $\frac{1}{30}$ to $\frac{1}{15}$ copec per pood of output; the abolition of control over the refineries, and also of the committee itself, as there would be no need for allotments of tank waggons, as on the completion of the through pipe line to Batoum the latter will be capable of handling the whole quantity of kerosene which it is proposed to export, *i.e.*, 60,000,000 poods.

Batoum Shipments.—The shipments of petroleum products from Batoum during the week ending January 28th, was as under (in thousand poods):—

	Illuminating oil.		Other products.	
	1905.	1906.	1905.	1906.
To Europe	412	113	201	190
To the East	488	3	—	—
To Russian Ports	219	350	—	—
From Jan. 1st to Jan. 28th:—				
To Europe	2,248	955	388	257
To the East	1,996	616	1	—
To Russian Ports	429	477	—	5

There were no shipments of residuals during either January, 1905 or 1906.

THE BATOUM PETROLEUM EXPORT TRADE.

The petroleum export trade at Batoum is greatly hampered by the exhaustion of the stocks of kerosene. The tanker "Sophie," which usually carries 123,000 poods, had recently to leave with only 63,000 poods. Many deliveries under contracts could not be carried out for want of oil, for the arrival from Baku had at the time of writing ceased entirely, owing to the interruption of traffic on the railway. There are now signs of a future reopening of the case factories, but in the opinion of those who are in a position to know, this can hardly be expected before the end of next autumn. The stocks of kerosene belonging to the Refiners' Syndicate are almost gone. During the second week of January there were some small shipments of case oil, but not more than 500 to 100 tins each, while there were no shipments of lubricating oil, owing to complete exhaustion of the stocks of these oils. The total export for that week amounted to only 66,000 poods, consisting entirely of kerosene. Some shipments of gas oil are now expected for English ports by the Consolidated Co.

Under the great difficulties which have beset the trade in the matter of deliveries from Baku and in shipments, the turnover of the export at Batoum in December was very small. At the beginning of the month, owing to the local disturbances, no ships could be loaded, although the same vessels received their cargoes later in the month. The total turnover of the month amounted to 1,685,000 poods, or only about a quarter of the normal monthly figure. There were no lubricating oil bulk shipments. The export of case and barrel oil did not exceed 42,000 poods, whilst there were no shipments at all of machine oil in barrels. Below are the figures of the arrivals and shipments in December, and stocks on the 1st of January, o.s. (in thousand poods):—

	Arrivals.	Shipments.	Stocks on 1st Jan.
Refined Kerosene	154	1,525	2,835
Kerosene Distillate ..	—	—	19
Solar Oil	—	29	431
Machine Oil	—	56	133
Spindle Oil	—	69	14
Cylinder Oil	—	6	19
Lubricating Oil istillate..	—	—	20
Residuals	—	—	213
Total	154	1,685	3,684

Such a condition is equivalent to an entire cessation of the trade, since only 154,000 poods have been delivered from the pipe line station from the stock in hand, whilst there was no kerosene pumped direct to Batoum by the pipe line. For want of kerosene, the central distributing station has not yet been able to deliver to the various firms the oil due to them, which constitutes the difference between actual loss in transit and the two per cent. usually deducted to allow for this. Lately, the pipe line has lost about 74,000 poods of kerosene through the wilful cutting of the pipes.

The export in December was distributed among the different destinations as under:—To England, kerosene, 909,000 poods; to other European countries, 322,000 poods; 289,000 poods of kerosene to Alexandria; 35,000 poods to Turkey; and to Odessa and other Russian home ports, 130,000 poods.

THE COMMONWEALTH OIL CORPORATION.

OPERATIONS COMMENCED.

The company under the above title recently formed by Sir George Newnes, M.P., and other English capitalists, for the purpose of developing the extensive shale deposits in the Capertee and Wolgan Valleys of New South Wales, has started operations in that colony. Surveys of an inclined tramway and a railway line to connect the property with the Government railways at Clarence siding has been completed, and actual work has been in progress for some weeks. Upwards of 100 men are now engaged in driving a tunnel through the mountain to connect the Capertee and Wolgan Valleys, and a commencement on the tramway from the mouth of the tunnel up to the tablelands to give connection with the company's light railway line is to be made forthwith. Arrangements are also well forward for the construction of a railway bridge across Constance Gorge at a cost of between £15,000 and £20,000. The tunnel, which is being driven from both valleys simultaneously, will be three miles long, and the shale seam is being cut right through. Some 23 miles of narrow gauge line will be required from Clarence siding to the gorge, from which the company's tramway will connect with the tunnel. Within a couple or three months it is expected that a large number of additional men will be employed on the various works.

◆

AMERICAN PATENTS GRANTED.

Heating Device for Oil Presses.—James W. Winfrey, Ashdown, Arkansas.

An oil press having a hollow head block, and a plurality of strengthening ribs arranged within the interior of the block for bracing the lower central portion of the latter, said ribs being inclined upward from the central portion toward the outer edges of said block, a steam supply pipe entering the upper portion of the hollow head, and an exhaust pipe leading from the lower portion of said head, the supply pipe being provided with a reducing valve for governing the quantity of steam admitted to said head.

System for Pumping Oil Wells.—Ross J. Hoffmann, Bradford, Pa.

A system of pumping a plurality of oil wells comprising a pump for each well driven positively on both strokes and having means for adjusting the action of each pump to the capacity of its well in relation to the capacity of other wells, a source of power for operating the pumps, pipe lines extending from the source of power to the pumps and a single controlling valve to control the supply of power to all the pumps whereby wells of varying capacity may be pumped off in the same period of time, and the pumps started or stopped by the manipulation of a single controlling valve.

Method of Producing Oil from Oil Wells.—Ross J. Hoffman, Bradford, Pa.

The process consists in pumping the oil well by a compressed air driven pump, and introducing a part of the compressed air supply into the oil delivery pipe.

Oil Tank Indicator.—William Torst, Jun., San Pedro, Cal.

In a device to indicate the quantity of crude oil in a tank, comprising a valve disposed below the tank, and having therein a valve stopper of a specific gravity greater than the oil and less than the brine, and having also an indicator tube communicating with said valve, and having in said indicator tube and valve, a liquid having a specific gravity greater than oil, the herein described extension tube disposed above the indicator tube, and having therein a transparent liquid of a like specific gravity with the crude oil.

GALICIAN KEROSENE ON THE GERMAN MARKET.

The unfortunate occurrences at Baku, which have so greatly diminished the output there, have involved the loss to Russian oil of part of its markets, and markets which have long been accustomed to Russian kerosene are now going over to its competitors. In direct relation to this is the unprecedented increase which has occurred in the export of Austrian kerosene in 1905.

The total export of refined kerosene from Austria-Hungary during the year reached 160,000 tons, of which 50,000 tons went to Germany. The exports to England in 1905 were also considerable. The exports to both these countries were *via* Trieste and Hamburg.

A considerable part of the Austrian kerosene consumed in Germany is taken up by the railways who are taking it up in the place of Russian kerosene. Thus the administration of the Wurtemburg railways has ordered in Austria 60 per cent. of its requirements in kerosene in 1906, and the administration of the Alsace-Loraine railways is taking 50 per cent. of its kerosene from Austria. All these contracts have been entered into with the Actien-Gesellschaft fuer Oesterreich-Ungarische Mineraloel Producte, the export organisation of the Galician Refiners' Cartel. The success of the Austrian export trade is due largely to the low prices which the Austrian refiners are quoting for their oil.

THE PETROLEUM TRADE IN FRANCE IN 1905.

The latest issue of the *Journal du Petrole* contains the following particulars concerning the petroleum trade in France in 1905. The year 1905 was marked with considerable activity in the petroleum trade of France. The growth of imports which was a feature of the last few years was continued in 1905, and what is of particular importance it was not due to speculative causes, but to the increased demands for consumption. The French petroleum market has remained unaffected by the rise in prices of oils in the countries of production during the year, and the price of refined oil at Paris has actually declined from 24 francs per hectolitre to 21·25 francs in December. The last-named price, which includes import duty and refining tax, may be considered in view of the quality of the oil (French test) as very low.

The margin of profit between the purchase and selling prices could not therefore have served as an inducement for increased imports in 1905. The increase in itself is very large. The imports of refined oil have increased from 1,289,845 hectolitres in 1904 to 1,917,500 hectolitres in 1905. Heavy oils from 81,394 tons to 93,513 tons. The imports of crude oils remain practically stationary, 304,281 tons in 1904 against 311,757 tons in 1905.

The quantities deiivered for consumption are:—

	1904.	1905.
Refined oil..	1,037,109 hectolitres	1,927,200 hectolitres
Heavy oils ..	66,773 tons	79,479 tons
Crude oils ..	316,633 ,,	337,635 ,,

The total quantity of various petroleum products consumed in France in 1905 may, therefore, be estimated at about 490,000 tons against 381,000 tons in 1904. This brings the consumption per head of population up from 9·9 kilos. in 1904 to 12·7 kilos. in 1905, which is a most remarkable fact.

The imports of Russian oil, as a result of the troubles through which the Russian petroleum industry is passing, have declined by half. The American importers have, however, benefited very little by the misfortunes of their principal competitor. It is Galicia, and more particularly Roumania, who have profited by it. The imports from these two countries taken together were:—Crude oils, 78,320 tons in 1905 against 16,962 tons in 1904; refined oil, 71,330 tons in 1905 against 30,642 tons in 1904.

The receipts from import duties on petroleum oils were:—

	1905.	1904.
Crude Oils ..	30,055,000 francs.	27,970,000 francs.
Refined Oil ..	19,287,000 ,,	10,388,000 ,,
Heavy Oils ..	7,238,000 ,,	6,091,000 ,,

The tax on refining of crude oils has yielded 4,173,000 francs, against 3,884,000 francs in 1904.

THE CZARITZIN OIL MARKET.

The operations of the Czaritzin oil market during the season which is now drawing to a close may be gauged by a comparison of the stocks at the beginning and the end of the season. On the 11th of January (o.s.) the stocks of kerosene at Czaritzin were as under:—

	Poods.
Nobel Bros.	1,282,000
Mazout Co.	1,440,000
Neft Co.	624,653
Volga-Caspian Co.	380,900
Merkulieff Bros.	344,101
Mantascheff and Co.	407,445
G. S. Dembot	152,835
Assadulaeff and Merkulieff	451,337
Total	8,083,411

At the close of navigation the stock of kerosene was 6,485,494 poods, shewing that the deliveries during the season were only 1,402,083 poods, which is a very poor figure. The explanation is to be found in the many strikes and interruption of railway traffic.

The stocks of residuals on the 11th of January were:—

	Poods.
Nobel Bros.	3,237,000
Mazout Co.	2,191,117
Neft. Co.	10,881
Volga-Caspian Co.	49,500
Total	5,578,498

At the beginning of the season the stock of residuals was 6,501,137 poods; the turnover of the market during the season has thus amounted to the quite insignificant quantity of 922,639 poods.

The stocks of lubricating oils, solar oils, etc., on the 11th of January were:—

	Poods.
Nobel Bros.	379,000
Mazout Co.	140,560
Neft Co.	118,818
Total	638,378

The deliveries of these oils during the season were only 29,042 poods.

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{11}{16}$-$\frac{13}{16}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	3/3-3/9
,, ,, ..	£650,000 5½% Pref.	£1	6/6-7/0
Californian Oilfields	£250,000 Ord.	£1	6⅜-6⅝
European Petroleum.. ..	£550,000 Pref.	£1	$\frac{3}{16}$-$\frac{5}{16}$
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	80-85
Russian Pet. & Liquid Fuel ..	£500,000 6½% Pref.	£1	14/0-15/0
,, ,, ...	£600,000 Ord.	£1	13/3-14/3
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	3⅝-3⅞
,, ,, ...	£575,000 Ord.	£1	10/0-11/0
Shell Transport & Trading ..	£2,000,000	£1	23/6-24/6
,, ,, ,, ..	£1,000,000 Pref.	£10	9¼-9½
Spies Petroleum Company ..	£312,500	10s.	7/0-8/0

SCOTCH COMPANIES.

Supplied by Messrs. Maclean and Henderson, Stirling.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. 8½ pd	£199,750	£10	18
Do. 6% Cum. Pref. ..	£100,000	£10	12½
Burmah Oil, Ord.	£1,100,000	£1	57s. 6d.
Do. Pref.	£250 000	£1	26s. 6d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	8½
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	18
Do. New (£8 10s. pd.)	£131,750	£10	16¼
Pumpherston Min. Oil Co., Ld., Ord (17s. paid)	£110,500	17s.	81s. 6d.
Do. 6% Cum. Pref.	£100,000	£10	12⅞
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	35s. 6d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	65s. 3d.
Do. "B" Deb...	£150,000	£100	147

RUSSIAN COMPANIES.

Company.	Nom. Value in Roubles.	Quotations on Feb. 13. Lowest Roubles.	Quotations on Feb. 13. Highest Roubles.
Baku Naphtha Co.	100	460	465
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	3,800	3,900
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	--	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	172	175
Neft Co.	250	—	—
Nobel Bros.	5,000	8,700	8,800
,, ,, ...	250	—	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

DUTCH COMPANIES.

Company.	Quotations Feb. 2nd.	Quotations Feb. 14th.	Florins.
Arnhemsche Petroleum Mij. ..	80	80	1,000
Dordtsche Petroleum Mij. (Pref.) ..	126	126	500
,, ,, ,, (Deb. 4½%)	102¾	102¾	1,000
Elzasser Petroleum Mij.	44¼	45	1,000
Gaboes ,, ,, ...	19¾	19¾	—
Holl. Rumeensche Petroleum Mij...	24¼	24	1,000
Int. Rum. Pet. Mij.	87	89½	500
Java Petroleum Mij...	30	30	1,000
Koninklyke Nederl. Pet. Mij. Shares	430–441	448½–452	250-1,000
,, ,, Share certificates	735	450	1,000
Mœara Enim Petroleum Mij. ..	111–112½	116¼–116¾	100
,, ,, 1-1,000 Oblig. 5	102	102	250-1,0
"Moesi Ilir" Petroleum Mij. ..	33½	36	—
Nederl.-Rumeensche Petroleum Mij.	16	16	
Nieuwe Ned. Petroleum Mij. And...	55¼	55¼	1,00000
Oliebronnen in Hannover Mij. ..	170	174	—
Panolan Maatschappij Cert. ..	356	340x.d.	—
Perlak Petrol. Mij. (6% cum.pr.A.) ..	136	138½	1,000
,, ,, (Common) ..	91½	92	—
Sumatra-Palembang Petroleum Mij	59	61	500

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Spies Petroleum Co., Ltd.—The output for the week ended February 11th was 135,960 poods, or 2,192 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended February 11th was 233,000 poods, or 3,758 tons.

Baku Russian Petroleum Co., Ltd.—The production for the week ended February 10th was 299,000 poods, or 4,822 tons.

The European Petroleum Co., Ltd.—The production for the week ended February 11th, 1906, was 90,714 poods, or 1,462 tons.

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Production of the Moeara-Enim Co.—The production of crude oil by the Moeara-Enim Petroleum Co., of Sumatra, in January amounted to 14,400 tons.

The Uralo-Caspian Petroleum Co. has in their first financial year, which comprises the period from 1st September, 1903, to 1st January, 1905, announced a loss of 32,907 roubles. The directors of the company are:—A. S. Krassilnikoff, K. H. Amiradjaniantz and A. M. Ter-Akopoff.

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 15th February, 1906, as follows:—

The market has gone very quiet all round, and prices for early delivery are a shade easier. We quote oil sizes to-day as under:—

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IC	20 × 10	225 ,,	156 ,,	18/6 to 18/9 ,,

F.o.b. Wales. Tin lining and iron hooping extra.

◆

Lecture on "Liquid Fuel."—At a meeting of the Students' Engineering and Metallurgical Society, held last week in Sheffield University, a paper on "Liquid Fuel" was read by Mr. H. Porter. Opening with a short description of the various oils used, he explained their production, and enumerated the countries from which the principal oil fuels are obtained. Then he dealt concisely with the principles underlying the application of liquid fuel, and after shewing various forms of furnaces and boilers in which the fuel may be used, he explained the means of obtaining complete combustion, and also the economies effected. Steam raising, both in marine and locomotive work, was treated; also the application of liquid fuel in metallurgical work (such as crucible and brass furnaces, etc.), and its use in the smithy.

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Saturday, February 17th, 1906.

AN INVESTIGATION THAT HAS FAILED.

> "The Sub-Committee have held an exhaustive enqury into all the questions raised, and though they do not consider it desirable to go into full details, they trust that the Committee will accept their assurance that their findings have been arrived at after carefully weighing all that has been put before them."

THIS significant statement stands out prominently in the report of the Investigation Sub-Committee of the Baku Russian Petroleum Co., Ltd., which was appointed to enquire into the allegations made by Dr. P. Dvorkovitz, and whose conclusions are now in the hands of the shareholders.

In these columns we have from time to time said some perhaps very hard things about the gullibility practised upon the shareholders of many Anglo-Russian petroleum companies, but never, we believe, have they been asked to accept a report which is so miserably weak and misleading as is the one now before us. It certainly does not say much for the opinion which the Sub-Committee or the board of the Baku Russian Petroleum Co. have of the intellect of their shareholders, for a more empty statement it is indeed impossible to imagine.

Our readers will recollect that as a result of an agitation set on foot by Dr. P. Dvorkovitz some weeks ago, an extraordinary meeting of shareholders was held, at which it was agreed that the serious accusations hurled at the promoters and directors of the company should be investigated by a special Committee. We argued that if the work of this Committee was to be worth anything at all, then the members forming it should be quite independent, and though we have no desire to labour this point so late in the day, the report of the work of that body on account of its general vagueness, shews what an independent and absolutely unbiased Committee would have been able to have accomplished.

Though necessarily the work which the Committee was called upon to carry out was of an important character, it cannot be said that in its nature it was in any way intricate. A most complete condemnation of the directorate had been made, and serious arguments had been put forward and practically substantiated up to the hilt, which affected the honour of some of the directors. The question for settlement therefore was—What were the actual facts? And the mandate which the Investigation Committee received from the general assembly of shareholders was pointedly clear. The fact was that the shareholders had in common phraseology "begun to smell a rat." They had heard so much of mismanagement and misappropriation of company funds into certain channels, that naturally they were determined to get at the truth if possible, especially after the lame excuses that had been put forward.

Thus the work of the special committee was clear, but its report is far behind expectations. Its members have shelved the true questions at issue as far as was possible: they have left unsaid those things which the shareholders rightly demand to know, and they have attempted to smooth over ugly matters in a manner most glaring.

Let us take the questions seriatim, and consider how far the agitation which has led up to the present position was justified, for it must be remembered that the whole of the accusations were looked upon by the directors as absurd; in fact, so absurd that the board "courted an enquiry." The first contention was that the promoters had, by taking exorbitant profits from the shareholders, crippled the concern from the first, and though before the shareholders Mr. H. N. Gladstone posed as an almost disinterested person, who had had little or no voice in the formation of the company, being as he said only one of 38 members, it has now been established that he and his firm—and, of course, it is difficult to tell where one goes out and another comes in—received over £100,000 out of the £400,000 made at the flotation.

This statement does not compare very favourably with the announcement made on behalf of Mr. Gladstone at the extraordinary meeting of shareholders last December, and it is decidedly regrettable that the Sub-Committee make no comment whatever upon the discrepancy in the figures. At all events, it is now proved that the flotation of the company was more remunerative to some of the present directors than its operations have been to the unfortunate shareholders.

Of the other matters for an investigation into which the Committee was appointed, the shareholders will not profit very much by the conclusions. The policy of the members of the Committee, without doubt in conformity with the expressed desire of the directors, has been to remain discreetly silent wherever possible, and thus it comes about that they venture no opinion whatever upon the transactions between Mr. Gladstone or his firm and the Baku Co., excepting that "they do not think that certain amounts paid, under the circumstances, were unreasonable." Here, again, the shareholders may possibly have a desire for a little more information. What circumstances were they which prompted the directors to give to Messrs. Ogilvy, Gillanders and Co. exactly five times the commission paid in the ordinary course of business for selling the oil, and three times the ordinary commission for the chartering of steamers? These several contracts were, it must be remembered, made and carried out when year after year the unlucky shareholders were not getting one cent. in return for their locked up capital, and yet some tens of thousands of pounds were frittered away to a firm under circumstances which "were not unreasonable."

This matter is one which should appeal to the shareholders in all its seriousness, for when such unbusiness-like arrangements are made among the persons in "the inner circle," can it be expected by anything less than a miracle that profits can be made for the shareholders? What were the "circumstances" which brought about such agreements, for (so the shareholders are told) it is only when these are taken into consideration that the contracts appear to not be unreasonable. Surely this is no investigation which shuts down its energy upon such an important point.

But, however guarded the Committee has been in its report, it has gone so far that anyone reading between the lines finds a wholesale condemnation of the whole directorate of the company. It is admitted that the present unfortunate position has been brought about mainly owing to the attempt to carry on the business "without adequate knowledge," and also that however unsuccessful the results of various agreements have been, the Committee are satisfied that they were honest attempts to improve the position of the company, though one contract was "a serious error." Thus they point out the necessity for placing the management both in London and Baku permanently upon a more economical and independent basis, as urgent—a view with which we think every shareholder will agree.

The time has come when a repetition of the former muddling—we put it in as mild a form as possible—should be impossible. There must be "a clean sweep" of those whose incompetency as directors of the company has dragged the concern to its most unenviable position. The Investigation Committee have come to the conclusion that there is a concensus of opinion as to the great value of the company's properties—and everybody knows it. This is the whole crux of the matter. The property is valuable, but the management is bad; consequently the return to the investors is nil. To those who know the industry, the present crisis in the affairs of the Baku Russian Petroleum Co. has been long delayed. The shareholders have not been alive to their own interest. Year after year they have lost £200,000, and yet said "Aye" to everything a board of incompetent directors has done at a profit to themselves of £4,000 per annum, and it is only now, when insolvency looms in the future, that the shareholders have been aroused to see the seriousness of the present state of affairs. But it is not too late. Organised opposition can do much, and if all the shareholders only cast in their lot with those who strive for reform, their investment is still good The iron is hot; then why not strike?

THE GROSNY PETROLEUM INDUSTRY.

LATE DETAILS OF INTEREST.

The political events in Russia, which were faintly re-echoed also in Grosny, have somewhat overshadowed the interests of the petroleum industry. For a very considerable time the output of the Grosny oil fields was rather low compared with the more productive period which preceded it. The causes of the decline were, however, quite normal, for the two spouters on the Akhverdoff Co.'s plot No. 22 had ceased flowing. On the 2nd of January (o.s.), however, they, as usual, both resumed flowing simultaneously, and again raised the Grosny output to 50,000 to 60,000 poods per day. Thanks to these two spouters, the figures of the total production of crude oil in Grosny in 1905 will be found to reach 41,000,000 poods. The exact figure, however, has not yet been ascertained, though it is almost certain the above figure will be exceeded.

There are loud complaints in Grosny petroleum circles about the continuance of the Glouchkoff concessions, through which 270 acres of the best petroliferous land in the district have been lying idle for 10 years. There is a general demand that these lands should be divided into 10 plots and leased out by auction. New terms are about to be introduced for the leasing of Government petroliferous lands at Grosny on the basis of a percentage royalty.

The price of crude oil in Grosny is now 19 copecs per pood. There is very little oil available for sale. The largest part of the output is, as usual, taken up by the Vladicaucasian Railway.

The past year has gone by without the holding of the annual conference of Grosny petroleum producers. The producers, as well as the local Technical Society, made telegraphic representations to the two Ministers of War and Finance, who have both a say in the matter, pointing out the anomalous condition of the Grosny petroleum industry, but they received no answer nor permission to call a conference. On the other hand, the District Administration, on the strength of the decision of the Government last year to restore to the producers the right of managing their own public works, have declined to manage the oil field hospital, which consequently cannot be kept up. The producers repeated their representation, including this time also the newly created Minister of Commerce and Industry. At the next conference, when it does meet, the producers propose to elect a council and technical committee, and also to regulate the question of the management of the joint fund.

The last-named question is important in view of the constantly growing needs of the industry. The labour question will also receive attention at the hands of the conference. The Grosny producers, to their honour be it said, are treating their workmen very fairly, and to this must be attributed the fact that neither at the wells nor at the refineries were there any strikes, political or otherwise during the period of general unrest throughout Russia.

THE DEUTSCHE PETROLEUM ACTIEN GESELLSCHAFT.

The directors of the Deutsche Petroleum Actien Gesellschaft, in which are centred all the petroleum interests of the Deutsche Bank, have just published their report for the financial year 1904-5.

The profits earned by the company in the past financial year amounted to 1,495,323 marks, viz: —From the holdings in petroleum enterprises, 1,398,961 marks interests, 22,984 marks; and balance brought forward from the preceding year, 73,378 marks.

The total profit available will be applied in the following manner: — Amortisation, 299,520 marks; 81,508 marks will be carried forward to next year, and the remaining 1,114,295 marks will be distributed as a five per cent. dividend.

Below are the principal items of the balance sheet compared with the one for the preceding year.

	1904-5. Marks.	1903-4. Marks.
Holding in Petroleum Companies	14,488,659	19,951,107
Cash in Hand and at Bankers ..	7,031,443	51
Debitors	1,087,276	1,111,148
Creditors	1,411,142	373,947

The report contains the following statements concerning the various enterprises in which the company is interested: —

"The Steaua Romana has in the year 1904-5 received a production of 209,797 tons of crude oil, against 184,608 tons in the preceding year. The additional works at the refinery of that company at Campina are nearly ready, and the installation for refining benzine has been working since April. We have sold a small part of the shares of the Steaua Romana belonging to us, and realised a good profit on them, and we have used the opportunity of the latest increase in capital to complete our holding."

The Erdoelwerke Wietzedorf Co., of Celle, has resumed its boring operations. The output of crude oil increased in proportion, and could be sold at good prices. It is feared, however that the profits of this enterprise may be substantially reduced by the reduced import duties on mineral oil which come into force with the new customs tariff on the 1st March, 1906.

The satisfactory development of the affairs of the Kasbeck Syndicate, Ltd., which we hoped for, has not yet been realised. Various accidents have occurred on the properties of this company, which have delayed operations. The causes of these accidents must be looked for among the errors committed previously. We hope that many things will improve. The company has secured a plot of land which offers splendid prospects, and on which a boring has already been carried out under most satisfactory conditions.

The Schodnica Co., of Vienna, will probably distribute a satisfactory dividend for the past financial year.

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A New Oil Company Formed in London.—Our German contemporary *Vulkan*, in its boring supplement *Tiefbohrwesen*, mentions the formation in London of a syndicate under the name of the Portuguese Petroleum Syndicate, Ltd. The object is to drill for petroleum in Portugal. The first wells are to be started in the Torres-Vedras district.

JANUARY OPERATIONS IN THE PENNSYLVANIAN FIELDS.

January proved another dull and uninteresting month in the history of the Eastern oil producing regions. Fewer wells were completed than during any month since last March, and the new production was the smallest recorded in many years. The decline in the West Virginia developments was continued, and there is nothing in evidence that promises to offset the waning supply of high-grade oil from this once-flourishing oil state. The volume of new operations, says the current issue of the *Oil City Derrick*, while a trifle below that of December is the smallest since last July. There is little in the petroleum regions as at present defined to rush the drill.

The West Virginia record for January was 76 productive wells, 23 dusters and 14 gassers, with a new production of 888 barrels. This was an average of 11·7 barrels to the well. Sisterville's new wells made the best average, 24 barrels each, while Calhoun had but seven productive wells, which averaged less than 18 barrels. The day of gusher strikes seems to be at an end in the oil sections of West Virginia.

The average yield of the wells in the Pennsylvania field was $6\frac{4}{5}$ barrels for the month, which is the smallest on record. The average yield of the new wells in the Eastern oil fields was $7\frac{3}{4}$ barrels in December, $8\frac{1}{4}$ barrels in November, $7\frac{3}{4}$ barrels in October, $9\frac{3}{8}$ barrels in September, $7\frac{1}{2}$ barrels in August, 8 barrels in July, 10 barrels in June, and $10\frac{3}{4}$ in May. The average for January, 1906, was $12\frac{1}{4}$ barrels to the well.

The total new production of the districts producing Pennsylvania oil amounted to 2,781 barrels in January. Of this amount West Virginia was credited with 888 barrels, or about 32 per cent., and South-Eastern Ohio with 847 barrels, or 30 per cent. The remaining 1,046 barrels, or 38 per cent., came from the districts north-east of the state line between West Virginia and Pennsylvania.

Another decrease was noted in the Trenton rock oil fields during the month. The wells completed numbered 274; the new production amounted to 3,077 barrels and there were 28 dry holes. This was a decrease of 51 wells completed, 664 barrels new production and eight dry holes from the December figures. In December 325 wells were completed, including 36 dusters and gassers, and the new production amounted to 3,741 barrels.

There were 127 wells completed in the oil sections of North-western Ohio in January, 18 of them were dry and the new production amounted to 1,241 barrels. This was a decline from December of 14 wells completed, 227 barrels production and a gain of five dry holes. The Lima oil fields of North-western Ohio completed 151 wells in December, including 13 dusters, and the new production was 1,468 barrels. This was a decrease of 21 completod wells, 152 barrels production and 11 dry holes. There were 107 wells abandoned in January and 96 in December.

In the Hoosier oil fields 137 wells were completed, including 10 dry holes, and the new production figured up 1,836 barrels. This was a decrease as compared with December of 37 wells completed, 437 barrels production, and 13 dry holes. There were 174 wells completed in the Indiana oil fields in December, including 23 dusters, and the new production was 2,273 barrels, which represented an increase of six completed wells and three dusters, accompanied by a decline of 263 barrels in the new production.

At the end of the month there were 75 rigs and 115 wells drilling under way in the Indiana oil fields, which was a gain of nine rigs and a loss of 51 wells drilling from the figures of December 31, making a net decline of 42. On the last of December the Indiana oil fields contained 66 rigs and 166 wells drilling, which was a drop of 10 rigs and nine wells drilling from the figures of the preceding month.

The following is a summary of wells completed, new production and dry holes for the various producing sections in January:—

	Wells Completed.	Production.	Dry.
New York	38	101	3
Pennsylvania	284	945	61
West Virginia..	113	888	37
South-Eastern Ohio	105	847	32
North-Western Ohio.. ..	137	1,241	18
Indiana..	137	1,836	10
Kentucky and Tennessee ..	32	465	7
Kansas..	81	946	30
Indian Territory and Oklahoma	310	13,038	46
Total	1,237	20,307	244
Total December	1,444	23,444	299
Decrease	207	3,136	55

GALICIAN KEROSENE IN THE FAR EAST.

The Austrian Consul at Tien-Tsin, in a report, gives the following interesting information regarding the petroleum trade:—

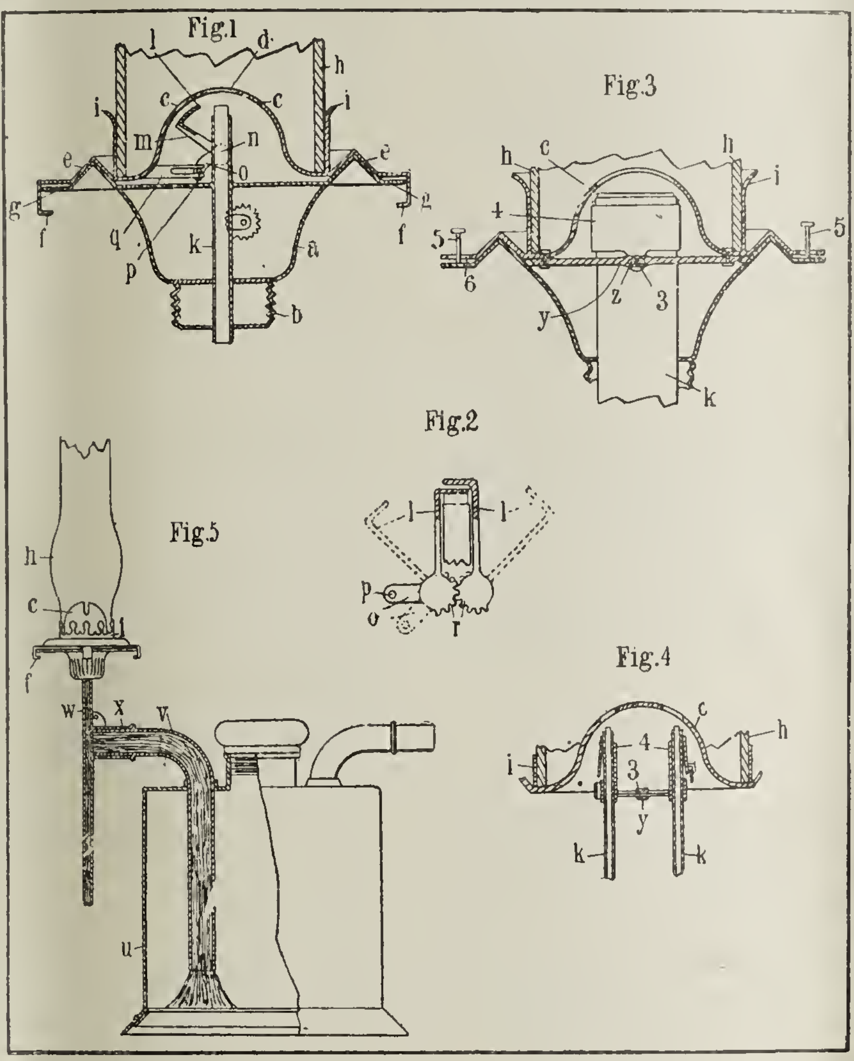
The Russo-Japanese War, and subsequently the catastrophe at Baku, have seriously undermined the trade in Russian kerosene in the Far East. Important Chinese ports, such as Tien-Tsin, were compelled to address themselves for kerosene to the Dutch-Indian companies, who could not, however, meet the whole demand, and of necessity part of the demand went to firms of other petroleum producing countries including Austria-Hungary. In 1904, the imports of kerosene to Tien-Tsin amounted to 20,730,160 gallons, of which 5,344,140 gallons came from America, 13,564,655 gallons from Russia, and 1,821,365 gallons from Dutch-India. The oil is delivered in light wooden boxes, containing two tins each. In order to compete successfully with the oils of other conntries, the Consul recommends that the Galician kerosene should be shipped to the East in cargoes of not less than 15,000-20,000 cases. The unloading is to take place at Taku, hence the cases will be delivered by road to Tien-Tsin. A great obstacle in the way of the development of an export trade is the absence of direct communication between the Austrian ports of Trieste and Fiume and Tien-Tsin. At present, Galician kerosene is shipped to Shanghai, where it is transhipped, greatly increasing the expenses and cost of the kerosene.

AN IMPROVEMENT IN OIL-BURNING LAMPS.

AN INTERESTING INVENTION.

As recorded in the Petroleum Review three weeks ago a patent has recently been accepted from Messrs. Louis Nissim, of 88, Baxter Avenue, Southend-on-Sea, George Butler Jones and Joseph Rogers Edwards, of 85, Gracechurch Street, London, E.C., for an invention which relates to the use of lamps burning liquid combustibles, and has for its object certain improvements particularly designed to increase the safety of such lamps, but incidentally introducing certain advantages in design.

For ensuring the extinction of the flame in case the lamp should become upset in any direction the following arrangement is adopted. The upper part of the lamp constituting what is usually considered the burner, is made in two parts; the bottom part, usually perforated to allow of the entrance of air, is fixed to the burner tube or wick tube, but the cap is not fixed to the bottom portion. The edges of the cap and of the bottom portion are suitably formed so as to interlock vertically; that is to say, both may be provided with suitable ridges, flanges or the like, which whilst preventing horizontal relative movement will allow the cap to rise from the lower plate. The rising movement is limited by suitable stops, such, for instance, as rivets passing loosely through holes in one of the members, but having heads which will act to stop the movement after it has taken place through a short distance. Turned-over flanges might effect the same object. Inside the burner cap is arranged a suitable plate capable of being turned to pass over the top of the wick, and so to extinguish the flame in well-known manner. A projection connected with the cap is adapted to engage with the said extinguishing plate in such a way that in whatever direction the cap tilts on the lower part the extinguisher will act. This may be effected, for instance, by arranging the projecting portion to engage midway in the length of an arm of the extinguisher. If the cap rocked about one point on its circumference the projection would rise as a whole with the cap and tilt the plate. If on the other hand, the cap tilted about the point diametrically opposite to the first-mentioned point, the projection would turn with the cap about said point as centre also acting upon the extinguishing plate.



With this arrangement, therefore, when the lamp stands vertically as is usual it will burn in the normal way. Immediately, however, that it falls over on its side the cap will rock, operating the extinguisher and so putting out the flame. The flanges between the cap and the lower portion can be such that a mere shaking or lateral shock insufficient to upset the lamp would not cause the cap to tilt. If the flanges between the cap and the lower portion were given square edges, this effect would be attained. The cap may, of course, carry the chimney, lamp globe, etc., in the usual way, and these will assist in turning the cap when the lamp is overturned.

Lamp burners made up as above explained may be applied to a type of lamp wherein the wicks do not descend directly into the oil reservoir, but are fed by wicks passing in a lateral direction from such a reservoir, and carried through tubes to points in the sides of the wick tubes proper. Any number of burners as above described might be applied to such a lamp having laterally extending feeder wicks, in which case said wicks would extend outward at suitable angles, and the burners would be in a cluster or head at the top. The extinguishing head is, however, applicable to any form of lamp, such, for instance, as the usual one, wherein the wick proper dips directly into the combustible liquid.

Referring first to Fgure 1: the body portion *a* of the burner is made to fit in the lamp in any suitable way, in this instance by screwing of the part *b* into a threaded neck of the lamp. The wick tube *k* is mounted in the body part of the lamp in the usual manner. The upper part or cap *c*, wherein is the slot *d* for the flame, is made separate from the lower part *a*, and is mounted on such lower part in such a way as to allow of a limited movement relatively thereto. In the example shewn the two parts have V-shaped ridges formed around the same at *e*, whilst the edge of the upper part *c* is bent over at *f* to engage under the edge of the rim *g* of the part *a*. *h* is the chimney fitting into a suitable holder *i* on the part *d*. This chimney may, of course, be replaced by a globe or any other form of shade or flame tube used upon lamps. The ridges *e* might be of semi-circular or other suitable section to engage one in the other.

It will be seen that when the upper part or cap *c* is resting upon the lower part *a* the ridges *e* fitting together keep said parts in their proper relative positions. If, however, the lamp becomes tilted or thrown sideways the cap *c* can move relatively to the part *a* within the limits allowed by the flange *f*; this movement is utilised for actuating the extinguisher. The extinguisher plate *l* is mounted on arms *m* pivoted at *n* upon the wick tube, and a tail-piece *o* is provided on one or each of said arms *m*, the tail-piece having a pin *p* engaged by a forked projection *q* attached to the upper part *c* of the burner.

With this device, when the edge of the cap or upper part of the burner rises at any point the projecting piece *q* will also rise, lifting the pin *p*, and so turning the arms *o m* and bringing the extinguisher *l* over the top of the wick projecting from the wick tube *k*. The movement allowed to the cap by the flanges *f* must be such that in whichever direction the cap tilts the end of the projecting arm *q* will rise sufficiently to operate the extinguisher. It will be seen, therefore, that the lamp will be extinguished at any time when the upper portion becomes tilted relatively to the body portion of the lamp; such tilting does not take place during the normal working or normal carrying of the lamp, but if the lamp begins to fall sideways owing to a shock or the like which it receives, the upper portion will tend to fall more quickly than the lower portion of the lamp, especially if there is a chimney upon the upper portion, and the required tilting action will take place. Moreover, the positive connection by means of the fork *q* and pin *p* ensures the return of the parts to their normal positions immediately that the lamp is again stood erect after having been upset, and also prevents the extinguisher from acting unless or until the lamp is upset or is dangerously tilted.

In the device shewn in Figure 2 two extinguishers *l* are provided, geared together in this case by toothed wheels *r*, so that when the pin *p* on one of the extinguishers is raised by the device shewn in Figure 1, or by an equivalent device, both extinguishing pieces will move together over the wick until they occupy the position shewn in Figure 2; normally the extinguishers occupy the positions shewn in dotted lines in Figure 2.

Figure 5 shews this extinguishing device as applied to a type of lamp wherein the oil reservoir *u* has feeder wicks *v* leading outward from the same, whilst one or more burners are provided mounted upon wick tubes *w*, which latter have sockets *x* adapted to fit over the ends of the feeder wick tubes as shewn. The extinguishing device used in this case operates in the manner before explained to put out the lamp whenever this latter becomes dangerously tilted or overthrown.

Figures 3 and 4 shew the way in which a "Duplex" extinguisher 4 of well-known type may be operated by a bar *y* fixed in the tilting cap, said bar having a slot *z* therein through which the cross piece 3 of the extinguisher passes.

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Production of the Shanghai-Sumatra Company.—The production of the Shanghai-Sumatra Co. for November, 1905, was 149,756 cases, and for December, 1905, 163,402 cases (refined), making a total for the year 1905 of 1,896,077 cases refined.

AMERICAN NOTES

From Indian Territory to Bayonne.—The longest pipe line in the world is now in working order, and quite recently oil was started upon its 1,500-mile journey from Indian Territory to Bayonne, to the refineries of the Standard Oil Co.

Californian Oil Dividends.—During the past year the various oil companies listed on the California Stock and Oil Exchange paid away in dividends a sum of $2,727,116, which, added to the dividends previously reported, brings the total up to $8,282,661.

The Recent Cyclone.—As shewing the force of the recent cyclone throughout many oil field regions, and the damage which it occasioned, the Muncie correspondent of the *Oil City Derrick* states that in Delaware County alone, no less than 330 derricks were blown down and torn into matchwood.

To Mark the Drake Well.—A proposal is now on foot to establish a permanent monument upon the site of the Drake well such as will befit the spot where was born a great era in the history of the industrial world of America. At the last meeting of the members of the Canadohta Chapter, daughters of the American revolution, the proposal was put forward and met with enthusiastic support.

Good News from Kentucky.—The current issue of the *Weekly Examiner*, of Bartlesville, states that good news has arrived from the Kentucky fields, for the latest oil-field report shews that the State has produced more high-grade oil during the past few days than ever in its history. The high-grade producing wells have the high average of over 67 barrels each, inclusive of a number of dry holes.

Trouble at Humble.—The entire field of Humble is in trouble on account of a strike among the oil field employés. The whole of the companies are effected, and the situation looks serious. Some hundreds of the strikers attacked the Guffey Company's property, and the pumping plant had to be shut down. The basis of the strike is said to be that the Union men are being discriminated against and discharged.

Property Transfer.—It is reported from Independence that the Shaw Oil Co. has recently sold its property in Neosho county, consisting of nine producing wells and some leases, to the Great Western Oil Refining and Pipe Line Co., of Erie, which has just completed its refinery. A pipe line is to be laid to the old Shaw property, in order that the production of oil may be piped to the refinery ten miles distant.

Fuel Oil *versus* Coal.—We learn that the increased production of heavy oil in the Californian fields has affected the production of lignite in that State and also in Oregon, as well as the production of bituminous coals in Washington in much the same way as the production of Texas oil has affected the coal mining industry of Arkansas and Indian Territory. So serious has this competition become that one mine in Oregon has already closed down.

More Salt Sand Territory.—A communication from Pittsburg states that in the lower south-west fields the developments on Goose Creek in Ritchie county are now attracting more attention than any other shallow sand territory. All of the late discoveries point to the development of a considerable area of salt sand territory. The latest well to attract attention is that drilled by the Wallace Oil Co., located on the headwaters of the Goose creek in Grant district, the well being almost a mile from any other producer. The Wallace Oil Co., by-the-bye, is composed of residents of Oakdale, who have secured leases upon 600 acres of land.

A Big Oil Deal.—Writing from Jennings, under date of January 27th, a *Houston Post* correspondent says that an important oil deal has just been closed, in which the Morse Oil Co., of Jennings, transfers to T. H. Bass, of Beaumont, all its holdings and property in the Jennings field. The Morse Oil Co. is one of the largest and most successful operating concerns in Jennings, having eleven wells now producing, three of which are famous gushers. In addition to the wells, Mr. Bass secures all the pumping plant, machinery, and all other necessary oil field property connected with the Morse Co. The deal is said to be the most important that has ever been made in the Jennings field.

The American Oil Market.

New York, Week ended Feb. 3rd.

Development operations in the Northern producing States, and especially in Ohio, have received a fresh stimulus, there having been quite a number of good wells brought in during the past week, and several which may be classed as large wells. In two instances slight enlargements of the productive area have been established and in one case a new well has been brought in so far in advance of developments as to give encouragement to the hope that this marks the discovery of a new pool. Already reports come of many locations being made, and drilling will be pushed with as much vigour as weather conditions will permit. Leasing is going on in advance of the known productive area, and it is probable considerable wildcatting will be indulged in, but all the available territory near the good wells brought in had been secured before the results were made public, and the seeker for land on which to bore holes must go farther from the known producing area. The majority of the wells brought in during the past week have been small pumpers, says the *Oil, Paint and Drug Reporter*, but the average production of all the wells shews a considerable increase by reason of the large wells already alluded to. The percentage of failures to find oil has also been smaller, and altogether the week has proved far more satisfactory in results than has befallen the lot of the driller for some time. There have been no new features of importance in either the mid-continent or Texas fields.

Refined and Products.—There has been considerable more animation in the market for refined for export during the past week, and the outlook appears to favour the belief that the demand will continue good, dependent, of course, from week to week upon the movement of the tank fleet. The conditions abroad shew no important change, although the foreign markets have weakened. Reports from Russia have been conflicting, some claiming considerable increase in crude production, but others stating the estimates sent out have been exaggerated. Progress is unquestionably being made, and as the country is becoming more tranquil, operations at Baku and vicinity will be resumed as rapidly as possible. The engagements for export during the past week have exceeded 300,000 barrels, all for shipment in bulk.

The price for barreled oil has remained steady at 7·60 for New York loading, and at 7·55c. for Philadelphia loading. The principal foreign markets are easier. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. 0d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export have been in fair request, and sales of about 250,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in active request, and sales of over 60,000 barrels are reported. Pennsylvania crude is quoted at 7·60c. in barrels.

Crude naphtha continues steady. For export, sales of about 10,000 barrels have been reported.

CLOSING QUOTATIONS.

Crude.		Week ended Jan. 20. 1906.	Feb. 3. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4·70	4·70
Residuum, bbls for export	.. ..	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were:—

	Week ended Feb. 3. 1905.	Feb. 3. 1906.
Tiona	1·54	1·68
Pennsylvania	1·39	1·58
North Lima	0·93	0·94
South Lima	0·88	0·89
Indiana	0·88	0·89
Canadian Oil:		
Petrolia	1·33	1·34

Refined—For Export.

		Week ended Jan. 20.	Feb. 3.
Cargo Lots for export..	per gal. ..	7·60	7·60
In bulk	.. ..	4·70	4·70
Philadelphia loading ..	.. ..	7·55	7·55

Refined in Cases—110 Fire Test.

	Week ending Jan. 20.	Feb. 3.
5,000 to 10,000	10·35	10 35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended Jan. 20.	Feb. 3.
120 fire test, S.W. ..	per gal...	12	12
130 fire test, S.W. ..	.. ..	12½	12½
150 fire test, W.W. ..	.. ..	13	13
In bulk from tanks	.. ..	10	10
300 fire test	.. ..	12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ending Jan. 20.	Feb. 3.
Naphtha, crude, car. lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	17	17

Pennsylvania Oil Runs from Jan. 26th to Jan. 31st were:—Jan. 26th, 75,884; Jan. 27th and 28th, 87,282; Jan. 29th, 46,824; Jan. 30th, 81,260; Jan. 31st, 67,432. For the month of December, 2,324,476.

The Deliveries of Pennsylvania Oil for the same dates were:—83,432; 119,981; 96,730; 92,459; 85,435; For the month of December, 2,450,174.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended Feb. 2 and from Jan. 1, were as follows:—

	Week.	Year.	1905.
Refined, barrels and bulk	321,900	835,100	795,000
Refined, cases	282,000	1,836,000	2,025,000
Crude, barrels and bulk..	60,900	190,000	101,100
Crude, cases	—	25,000	30,000
Naphtha, barrels.. ..	6,500	51,100	42,000
Residuum, barrels ..	—	32,000	80,800
Lubricating, barrels ..	21,100	42,900	3,100
Total, barrels cde. eq. ..	672,975	2,197,622	2,053,069

Clearances for the Week.

During the week ended Feb. 2nd, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1905.
Refined	16,938,760	38,031,090	44,437,453
Crude	—	7,700	113,453
Naphtha	22,000	1,056,450	816,327
Residuum	—	—	1,842,964

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Feb. 2nd ..	22,585,013
Total from New York, from Jan. 1, 1906 ..	50,719,153
Same period last year	59,363,390
Decrease	8,644,237
From United States, week ended Feb. 2nd ..	37,257,333
Total from United States, since Jan. 1, 1906	96,407,595
Same period last year	87,366,085
Increase	9,041,510

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The "Review" Shipping List.

FEB. 15, 1906.

Specially Prepared for this Journal.

NOTE.—Except when otherwise stated the Vessels are Steamers.

(*The following abbreviations are used in this table*:—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Sables d'Olonne	Philadelphia	L. Jan. 22
ALCHYMIST	London	Shoreham	L. Feb. 14
AMERICAN	Antwerp	New York	Arr. Feb. 7
APPALACHEE	SanFrancisco	Shanghai	L. Jan. 24
APSCHERON	Batoum	Barcelona	Arr. Feb. 11
ARAL	Philadelphia	Dover	L. Feb. 5
ARAS	Batoum	London	L. Const'iple, Feb. 4
ARGYLL	Port Harford	Portland	L. Jan. 29
ASTRAKHAN	Tyne	Philadelphia	Arr. Feb. 14
AUGUST KORFF	Philadelphia	Nordenham	L. Feb. 10
AUREOLE	Philadelphia	London	Arr. Feb. 14
AZOV	Coleta Buena	Callao	Arr. Nov. 16
BAKU STANDARD	Kustendje	Rouen	L. Constanti'ple, Feb. 4
BALAKANI	Port Arthur (Texas)	NewportNws.	P. Cape Henry, Feb. 3
BATOUM	London	Tyne	Arr. Feb. 10
BAYONNE	Venice	New York	Arr. Feb. 8
BEACON LIGHT	Lisbon	Cardiff	P. Barry Island, Feb. 14
BEME	Rangoon	Mormugao	L. Jan. 18
BLOOMFIELD	Tyne	New York	Arr. Feb. 10
BORJOM	Batoum	Alexandria	Arr. Feb. 6
BRILLIANT	New York	Hamburg	L. Feb. 4
BROADMAYNE	Manchester	Kustendje	P. Peniche, Feb. 10
BULLMOUTH	Palembang	—	L. Feb. 2
BULYSSES	Amsterdam	Kustendje	Arr. Feb. 6
BURGERMEISTER PETERSEN	Philadelphia	Swinemunde	P. Del. Break., Feb. 5
CADAGUA	—	—	In port, Bilbao, Jan. 31
CALCUTTA (Br. bq.)	Newcastle (N.S.W).	SanFrancisco	L. Dec. 4
CARDIUM	Singapore	—	L. Jan. 23
CAUCASIAN	Philadelphia	London	P. Del. Break, Feb. 2
CHARLOIS	Antwerp	New York	Arr. Jan. 28
CHESAPEAKE	Manchester	Philadelphia	Arr. Del. Break., Feb. 11
CHESTER	Philadelphia	Antwerp	Arr. Feb. 10
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Kobe	—	L. Jan. 31
COL. E. L. DRAKE	New York	Galveston	L. Oct. 25
COWRIE	Cardiff	Singapore	L. Suez, Feb. 11
CYMBELINE	Philadelphia	Avonmouth	P. Del. Break., Feb. 1
CZAR NICOLAI II.	Hamburg	Batoum	Off I. of W., Feb. 12
DAGHESTAN	Philadelphia	St. Louis (Rhone)	Arr. Feb. 11
DAKOTAH	Hong Kong	SanFrancisco	K. Kobe, Jan. 23
DELAWARE	New York	Belfast	Arr. Feb. 13
DEUTSCHLAND	New York	Hamburg	L. Feb. 11
DIAMANT	Savona	Philadelphia	P. Gibraltar, Feb. 5
ELAX	Calcutta	Port Soesoe	Arr. Feb. 2
ELISE MARIE	New York	Swinemunde	L. Feb. 4
ENERGIE	Tyne	New York	L. Feb. 9
ERIVAN	Swansea	Port Arthur (Texas)	Arr. Feb. 8
EUPLECTELA	Philadelphia	Hamburg	Arr. Feb. 7
EXCELSIOR	New York	Channel	L. Feb. 4
EZIO	—	—	Coasting Peru
FRANCE MARIE	Marcus Hook	Barcelona	Arr. Dec. 6
GEESTEMUNDE	Philadelphia	Christiania	P. Del. Break., Jan. 25
GENESSE	Philadelphia	Liverpool	Arr. Feb. 13
GEORGIAN PRINCE	Tyne	New York	L. Jan. 30
GOLDMOUTH	Soesoe	Rotterdam	Arr. Feb. 13
GRAF STROGANOF	Cronstadt	Odessa	In Tyne, Jan. 10
GUT HEIL	Pillau	Havana	Arr. Jan. 19
HAINAUT (Dch. shp.)	Smyrna	Antwerp	P. Zea, Feb. 4
HARRY WADSWORTH	Port Arthur (Texas)	—	At Norfolk (Val.), Feb. 10
HELIOS	Fiume	Trieste	Arr. Feb. 6
HOTHAM NEWTON	Middlesboro'	New York	P. Scilly, Jan. 31
HOUSATONIC	Newcastle (N.S.W.)	SanFrancisco	L. Jan. 31
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Novorossisk	Naples	L. Consti'ple, Feb. 6
J. B. AUG. KESSLER	Philadelphia	Galveston	P. Del. Break, Jan. 24
JAMES BRAND	Tyne	Port Arthur (Texas)	L. Jan. 16
KURA	Penarth	Philadelphia	L. Feb. 8
LA CAMPINE	Antwerp	New York	Arr. Feb. 2
LA FLANDRE	Ghent	Philadelphia	P. Lizard, Feb. 13
LA HESBAYE	New York	Antwerp	L. Feb. 1
LA MADALEINE	St. Louis (Rhone)	Antwerp	Arr. Feb. 9
LA VIGUESA	Marcus Hook	Vigo	Arr. Nov. 6
LACKAWANNA	London	Philadelphia	L. Feb. 14
LE COQ	Port de Bouc	Philadelphia	P. Gibraltar, Feb. 5
LOUTSCH	Barcelona	Novorossisk	L. Const'n'ple, Sept. 5
LUCERNA	Manchester	Philadelphia	Arr. Feb. 6
LUCIFER	Newport	Nantucket	P. Old Head of Kinsale, Feb. 5
LUCIGEN	Philadelphia	Rotterdam	P. Del. Break., Feb. 2
LUCILINE	Cette	Philadelphia	Arr. Feb. 5
LUMEN	Bergen	Tyne	Arr. Jan. 12
LUX	Rouen	Novorossisk	L. Feb. 11
MAKKAVEI	Batoum	Odessa	L. Jan. 13
MANHATTAN	New Orleans	Bremen	P. Dover, Feb. 14
MANNHEIM	New York	Rotterdam	L. Feb. 6
MARGARETHA	London & Newport	Manzanilla	Off Barry Island, Feb. 1
MEXICAN PRINCE	Tyne	Cienfuegos	Arr. Feb. 4
MIRA	—	Havre	Arr. Havre, Feb. 12
MUREX	Soesoe	Samboe	Arr. Feb. 8
NARRAGANSETT	New York	Hamburg	Arr. Feb. 12
NERITE	Singapore	BalekPappan	Arr. Feb. 7
NEW YORK	New York	Southampton	Arr. Feb 11
OCEAN	Philadelphia	Flushing	P. Del. Break., Feb. 1
ORANJE PRINCE	Tyne	Cuba	L. Jan. 28
ORIFLAMME	Marcus Hook	Rouen	Arr. Feb. 13
OSCEOLA	Tyne	HamptonRds.	Arr. Feb. 11
OTTAWA	Marcus Hook	Vera Cruz	P. Del. Break., Feb. 4
OURAL	Port Arthur (Texas)	Rouen	L. Jan. 29
PALEMBANG	Bangkok	Palembang	L. Jan. 10
PAULA	New York	Dantzig	P. Butt of Lewis, Jan. 12
PECTAN	Port Arthur (Texas)	—	L. Feb. 3
PENNOIL	Philadelphia	Rotterdam	Arr. Jan. 20
PERLAK	Pulo Samboe	Singapore	Arr. Dec. 27
PETROLEUM	Gibraltar	—	Arr. Dec. 18
PHOEBUS	New York	Hamburg	Arr. Feb. 13
PINNA	Philadelphia	Dover	P. Del. Break., Jan. 30
POTOMAC	Philadelphia	Avonmouth	Arr. Feb. 14
PRUDENTIA	Rouen	Port Talbot	Arr. Jan. 21
RION	Tyne	Port Arthur (Texas)	P. Prawle Pt., Feb. 10
ROCK LIGHT	Port Arthur (Texas)	—	L. Newport News, Feb. 6
ROSSIJA	Hamburg	Novorossisk	P. Dover, Feb. 11
ROTTERDAM	New York	Rotterdam	Arr. Feb. 11

Vessel.	From.	For.	Latest Date and Position.
PROMETHEUS....	Adelaide....	London	L. Feb. 3
RUSSIAN PRINCE	New York ..	Havana	L. Feb. 5
SALAHADJI	Newchang ..	Singapore ..	Arr. Dec. 18
SEMINOLE........	Philadelphia	Calcutta	Arr. Feb. 7
SILVERLIP	Hamburg ..	Tyne	Arr. Feb. 2
SINGU	Bombay	Rangoon ..	L. Jan. 26
SNOWFLAKE	Philadelphia	Hull........	L. Feb. 11
SOPHIE	Venice	Messina	L. Feb. 6
SPONDILUS	Cardiff......	Singapore ..	P. Malta, Feb. 13
STANDARD	Copenhagen	Bangkok....	At Port Said, Feb. 13
STROMBUS	Singapore ..	—	L. Jan. 14
SURAM	Penarth	Newport....	Arr. Feb. 13
SUWANEE	Barrow	New York ..	L. Feb. 10
SVIET	Batoum	Alexandria..	Arr. Feb. 7
TELENA	Cardiff	Singapore ..	Arr. about Feb. 1
TEREK............	Manchester	Philadelphia	L. Liverpool, Feb. 5
TIFLIS	Tyne	Philadelphia	Arr. Feb. 14
TIOGA	Batoum	Liverpool ..	Arr. Nov. 25
TONAWANDA	New York ..	Kurrachee ..	L. Feb. 3
TROCAS	Kobe	—	L. Feb. 7
TURBO	Port Arthur (Texas)	—	At Newport Nws. Feb. 8
TUSCARORA......	Calcutta and Boston	New York ..	Arr. New York, Feb. 2
TWINGONE	Rangoon....	Madras	Arr. Jan. 27
VEDRA............	Algiers	Philadelphia	Arr. Feb. 14
VILLE DE DIEPPE	Philadelphia	Rouen......	P Del. Break, Feb. 5
VILLE DE DOUAI	Calais......	Calais......	Arr. about Feb. 1
VOLUTE	BalekPappan	—	L. Feb. 5
WEEHAWKEN....	London	Sumatra	At Colombo, Feb. 2
WILLKOMMEN ..	New York ..	Swinemunde	L. Feb. 12
WINNEBAGO (Late KINSMAN)	Shanghai ..	Bombay	Arr. Jan. 26

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

February 16th, 1906.

Petroleum, although unchanged, has been steady during the week. The quotations are: for Russian 5¼d.; American, 6⅛d.; Water White, 7½d.; and Roumanian, 5¼d.

LUBRICATING OILS

remain as follows:—

American pale, £7 5s. to £8 15s.
American dark cylinder, from £7 10s.
American filtered cylinder, from £10 12s. 6d.
Shellene, £5.

TURPENTINE.

American turpentine is very firm at 48s. 3d. to 48s. 6d. for Spot and to the end of April, slightly lower prices for further forward deliveries.

LIVERPOOL OIL MARKET

February 15th.

Refined oils are very quiet, but sellers now quote 6¾d. for Russian and 7½d. to 8¾d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, February 15th.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, February 15th.

Standard White is quoted at 7·55.

RUSSIA.

Baku, February 13th.

The petroleum market is firm. Light crude is now quoted, spot, 24 copecs; heavy Balakhany crude, spot, 26 copecs; future, 27 copecs; residuals, 27 copecs.

BELGIUM.

Antwerp, February 10th.

The petroleum market is quiet. Price of Standard White, spot, 19½ francs per 100 kilos; February, 19¾ francs; March-April, 20 francs.

GERMANY.

Hamburg, February 10th.

The kerosene market is weak. The price of American Standard White is 7·10 marks per 50 kilos.

ROUMANIA.

February 9th.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs. ...	3·35-3·40
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery ...	3·00- —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural...	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octroi tax of 12 fcs. per 100 kilos.

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
,, sp. gr. 0·720-0·725	8·00- 9·00
,, sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

Bombay, January 27th.

There has been no change in prices of Burma oils since our last report, but the tendency is firmer.

American, "Snowflake," 150 deg.	Rs. 6	0	2
,, Chester, 125 deg.	4	8	2
,, Monkey Brand, 125 deg.	4	2	2
Russian, "Anchor," 125 deg.	4	14	6
,, "White Camelia" brand, 125 deg. ..	4	0	2
,, "Rising Sun," bulk, in local made tins ..	3	14	0
,, "Elephant" brand, in local made tins ..	3	10	0
,, Bulk, in Bombay Bazaar, 125 deg. per 10 gallons..	3	3	0
Borneo oil in bulk	2	14	6
Burma Oil, in bulk, per 8 imperial gallons	2	11	0

◆

BATOUM CASE OIL FACTORIES TO BE RE-OPENED.

The Russian *Trade and Industry Gazette* is informed by its correspondent at Batoum that the case factories there are to be opened shortly.—[This information is certainly very welcome news, and confirms the rumour announced elsewhere in this issue.—Ed. *P.R.*]

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IMPORTS of PETROLEUM into UNITED KINGDOM

FOR THE WEEK ENDED FEBRUARY 13th, 1906.

Specially prepared for this Journal by . . . the Custom House.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Feb. 7	London	A. Brown and Co.	Albatross	400 brls.	M. Lub.	16,000	Hamburg
,, 7	,,	London and India Dock Co.	Maine	5 brls.	,,	200	New York
,, 8	,,	Anglo-American Oil Co	Minnetonka	265 brls.	Lub.	10,600	,,
,, 8	,,	,,	,,	2405 brls.	,,	96,200	,,
,, 8	,,	,,	,,	125 brls.	M.Colza	5,000	,,
,, 8	,,	G. W. Sheldon and Co.	Redstart	7 brls.	Lub.	300	Antwerp
,, 8	,,	D. C. Thomas and Son	City of London	7 brls.	Turp. Sub.	290	Brussels
,, 9	,,	Vacuum Oil Co.	East Point	120 bls.	Lub.	4,800	Philadelphia
,, 9	,,	London and India Docks Co.	Minnetonka	322 brls.	,,	12,880	New York
,, 9	,,	C. J. Pyer	,,	30 brls.	,,	1,200	,,
,, 9	,,	Mordaunt Bros.	Volturno	100 brls.	,,	4,000	Trieste
,, 9	,,	,,	,,	50 brls.	,,	2,000	Fiume
,, 9	,,	,,	Szent Istoon	50 brls.	,,	2,000	,,
,, 9	,,	H. Hill and Sons	,, ,,	100 brls.	,,	4,200	,,
,, 10	,,	G. Woodcock	Volturno	300 brls.	,,	12,000	,,
,, 10	,,	H. Finkler and Co.	Szent Istoon	300 brls.	M. Lub.	12,000	,,
,, 10	,,	Anglo-American Oil Co.	East Point	250 brls.	Lub.	10,000	Philadelphia
,, 10	,	,,	,, ,,	2215 brls.	,,	88,600	,,
,, 10	,,	,,	,, ,,	180 brls.	Min. Colz.	7,200	,,
,, 11	,	London Oil Storage Co.	Valena	32 casks 92 drums 6 cases	Lub.	1,860	Hamburg
,, 11	,,	G. W. Baker	Volturno	100 br s.	,,	4,000	Fiume
,, 11	,,	,,	,,	125 brls.	,,	4,010	Trieste
,, 11	,,	H. Finkler and Co.	,,	100 brls	,,	4,000	,,
,, 11	,,	,,	,,	150 brls.	,,	6,000	,,
,, 11	,,	Produce Brokers	Ptarmigan	70 brls.	M.Lub.	2,800	Antwerp
,, 11	,,	G. W. Sheldon and Co.	East Point	190 brls	,,	7,580	Philadelphia
,, 11	,,	W. H. J. Alexander	Redstart	60 brls.	Lub.	2,400	,,
,, 13	,,	General Petroleum Co.	Pinna	Bulk	Ref. Lamp.	717,200	Fiume
,, 13	,,	,,	,,	Bulk	,,	176,800	Philadeldhia
,, 13	,,	Produce Brokers	Volturno	150 brls.	M.Lub.	6,000	,,
,, 13	,,	Anglo-American Oil Co.	Aureole	Bulk	Lub.	332,176	New York
,, 13	,,	,,	,, ,,	Bulk	Gas	1,011,640	Hamburg
,, 8	Liverpool	Liverpool Storage Co	Victorian	60 brls.	Lub.	2,400	New York
,, 9	,,	,,	Cyclone	42 brls.	,,	1,680	Hamburg
,, 10	,,	Valvoline Oil Co.	Salvonia	50 casks	,,	2,050	New York
,, 11	,,	W. Gibson and Sons	Bohemian	50 brls.	Lamp	2,050	Boston
,, 11	,,	Anglo-American Oil Co.	Genesee	Bulk	Lub.	466,000	Philadelphia
,, 11	,,	G. B. Taylor	Cevic	3599 brls.	M.Lub.	143,960	New York
,, 13	,,	P. R. McQuie and Sons	Noordland	13 pks.	M.L. Grease	500	Philadelphia
,, 13	,,	Cunard Steam Shipping Co.	Pannonia	3649 brls.	M.Lub.	136,080	New York
,, 13	,,	,,	,,	100 brls.	,,	3,780	,,
,, 13	,,	Valvoline Oil Co.	,,	435 casks	Lub.	17,840	,,
,, 13	,,	,,	Slavonia	15 casks	,,	620	,,
,, 13	,,	C. W. Field	Nyroca	5 casks	M.Lub.	210	Antwerp
,, 13	,,	Bramwell, Fern and Co.	,,	100 brls.	,,	4,170	,,
,, 13	,,	Vacuum Oil Co.	Cevic	131 ½-brls.	Lub.	2,620	New York
,, 8	Bristol	H. R. James and Son	Bristol City	203 brls.	Min. Colz.	8,120	,,
,, 8	,,	,,	,, ,,	80 brls	Lub.	3,200	,,
,, 8	,,	Spillers and Bakers	,, ,,	15 brls	,,	630	,,

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To Dealers only.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Feb. 8	Bristol	W. Smith and Co.	City of Bristol	779 brls.	Lub.	31,160	New York
,, 8	,,	,,	,, ,,	149 brls.	,,	5,960	,,
,, 7	,,	Pickfords, Ltd.	City of Liverpool	81 pks.	,,	510	Hamburg
,, 7	,,	Western Petroleum Oil Co.	Suram	Bulk	Lamp	408,000	Batoum
,, 7	Cardiff	Homelight Oil Co.	,,	Bulk	,,	435,200	,,
,, 7	,,	Western Petroleum Co.	,,	Bulk	,,	408,000	,,
,, 8	Goole	Goole Steamship Co.	Airmyn	20 brls	Lub.	800	Antwerp
,, 8	,,	,,	Morena	6 brls.	M. Lub.	240	,,
,, 8	,,	,,	,,	12 brls.	,,	480	,,
,, 8	Grimsby	J. Sutcliffe and Sons	Ashton	12 brls.	Lub.	480	,,
,, 8	Hull	T. Wilson, Sons and Co.	Bruno	114 pks.	,,	1,580	Hamburg
,, 8	,,	,,	Sultan	4 brls.	,,	160	Antwerp
,, 8	,,	,,	Otto	375 brls.	,,	15,000	,,
,, 7	Manchester	Donald Currie and Co.	Holnis	150 brls.	M.Lub.	6,000	Hamburg
,, 7	,,	J. T. Fletcher and Co.	Pandion	19 casks	,,	610	Antwerp
,, 7	,,	Liverpool Warehousing Co.	Calderon	30 brls.	,,	1,200	New York
,, 7	,,	Livrepool Storage Co.	Thespis	419 brls.	,,	17,598	,,
,, 7	,,	R. Steinmann and Co.	Stuart	30 casks	,,	1,200	Hamburg
,, 5	Newcastle	Hassell and Sons	Queenboro	400 brls.	,,	16,000	New York
,, 10	,,	Tyne-Tees Steam Shipping Co.	Juno	100 brls.	R.M.Lub.	4,000	Antwerp
,, 12	Plymouth	Anglo-American Oil Co.	Potomac	Bulk	Illum.	492,590	Philadelphia
,, 8	Swansea	Bristol Steam Navigation Co.	Geir	25 brls.	Lub	1,030	Antwerp
,, 8	Glasgow	J. and A. Allan	Laurentian	799 brls.	M.Lub.	40,000	Philadelphia
,, 8	,,	,,	,,	400 brls.	Min. Colz.	20,000	,,
,, 7	Grangemouth	W. G. Yooll and Co.	Staffa	100 brls.	Lamp	4,000	Hamburg
,, 7	Leith	,,	Breslau	50 brls.	,,	2,180	,,
,, 7	,,	,,	Sardinia	50 brls.	,,	2,180	,,
,, 7	,,	J. Cormack and Co	Dartmore	30 brls.	Lub.	1,200	Riga
,, 8	,,	Graham-Yooll and Co.	Coblenz	100 brls.	Lamp	4,360	Hamburg
,, 8	,,	W. Gibson and Sons	Durward	4 brls.	Lub.	160	Rotterdam
,, 12	,,	Graham Yooll and Co.	Corsica	100 brls.	Lamp	4,360	Hamburg
,, 10	Belfast	Anglo-American Oil Co.	Delaware	Bulk	,,	82,376	New York
,, 9	Dublin	,,	Excelsior	Bulk	D.Resid	93,040	Philadelphia
					Net Total	6,263,500	

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO FEBRUARY 10th, 1906.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.
Austria ...	—	868,230	60,210	142,460	—	11,000	—	—	—	—	—	—	—	—	60,210	1,032,690
Belgium ...	—	240	32,680	78,030	—	11,000	—	—	—	1,620	—	—	290	696	32,970	80,586
Borneo ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Canada ...	—	—	—	—	—	20,000	—	—	—	—	—	—	—	—	—	20,000
Germany ...	17,080	682,660	28,830	302,050	—	—	—	—	—	2,320	—	—	—	4,980	45,910	1,002,050
Holland ...	—	—	160	160	—	—	—	—	—	773,600	—	98,200	—	7,080	160	879,040
Roumania ...	—	1,360,000	—	—	—	—	—	—	—	—	—	—	—	—	—	1,360,000
Russia ...	1,251,200	6,197,920	1,200	3,000	—	—	—	—	—	—	—	—	—	5,410	1,252,400	6,206,330
Sumatra, &c	—	—	—	—	—	—	—	—	—	930,000	—	—	—	—	—	930,000
U.S.A. ...	1,471,016	8,346,267	1,425,834	5,938,144	93,040	523,328	1,011,640	7,739,910	—	1,069,180	—	—	40,320	185,490	4,041,850	23,792,229
Other Countries	—	—	—	4,030	—	—	—	—	—	480	—	—	—	90,300	—	94,810
	2,739,296	17,455,317	1,548,914	6,467,914	93 040	565,238	1,011,640	7,739,910	—	2,777,200	—	98,200	40,610	293,956	5,433,500	35,397,735

Telegraphic Address:—"OLEINE."

Telephone Nos.:—{249 & 254 LIVERPOOL.
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PETROLEUM PRODUCTS THROUGHOUT NORTHERN AND MIDLAND DISTRICTS OF ENGLAND.

SPECIALITIES: All Grades of

GAS OILS, MINERAL LUBRICATING OILS, PARAFFIN SCALE AND WAX, PETROLEUM SPIRIT, BENZOLINE AND BENZINE, SWANSDOWN WATER WHITE AMERICAN PETROLEUM.

The Petroleum Review.

By PAUL DVORKOVITZ.

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Editorial Notes.

TO OUR READERS.

In reply to a number of enquiries from subscribers, we would state that the complete Index to Volume XIII. of the "Petroleum Review"—which includes the issues from July to December, 1905—is now in course of preparation, and will be published in the "Review" of March 10th.

The "Review" Celebrates Its Eighth Birthday.

With this issue, the PETROLEUM REVIEW celebrates its eighth birthday, and we would, therefore, take advantage of the opportunity to express our thanks to our readers throughout the oil fields of the world for their cordial and continued support, for without this, the REVIEW would not stand as it does to-day—the leading weekly petroleum journal of the world. Many changes have overtaken the industry since the REVIEW saw the first light of day, and on every hand we see how it has risen almost from obscurity to occupy a foremost position in the world's commerce. Wherever we look, there is evidence of the rapid headway which the industry has made during the past decade. New territories of supply have been opened out, and the uses of petroleum and its many products have received recognition in an almost unlimited sphere. Consequently, it can truly be said that the petroleum industry has indeed progressed to such a degree that the section of the public to which the REVIEW appeals is now much larger than was the case when our publication made its appearance and took its place among the techniological literature of the day. We have endeavoured to carry into the columns of our journal the highest principles, and by taking care that it should be an absolutely independent journal, we are pleased to note that each succeeding year brings its reward, for the PETROLEUM REVIEW is constantly adding to its list of readers, so much so, that its subscribers are now found in the uttermost corners of the world.

The Petroleum Production of Roumania in 1905.

The petroleum industry of Roumania has steadily progressed during the past year, and, though the total production—substantial as it is—may not exactly come up to expectations, the advance is nevertheless considerable. As a matter of fact, Roumania's petroleum industry has not as yet got properly upon its feet. True, there is a great amount of development proceeding in the oil fields themselves, and there is a constantly increasing output, but before the industry enjoys the benefits of a highly successful producing country much has to be done. The export trade has to be organised and extended, and many prejudices with regard to the Roumanian product have to be lived down, especially in this country. But in time we doubt not that this will come about. The producing regions of the country are entering a new era, and, though it is premature to judge the extent of that success, it is a certainty that ere long, the Roumanian fields will pass through a period of activity which will almost be without parallel. The increase in the production from the whole fields last year, as against that for the preceding twelve months, works out at considerably over 20 per cent.—an advance that does not fall to the lot of any other Continental oil producing region.

The Baku Disturbances: Crude Oil Losses.

The details of the losses of crude oil in the Baku fields during the disturbances of last August will be read with some amount of consolation, since we are familiar with the highly coloured accounts which have appeared in some journals concerning the crude oil destruction during the riots. The figures not only fail to bear out the reports which have been communicated to the shareholders of some of the Anglo-Russian companies, but they are remarkably small, for the crude oil destroyed only amounted to about 3,000,000 poods, or approximately two days' production under normal conditions. Messrs. Mantascheff and Co. were the largest losers, for nearly 700,000 poods of crude were destroyed in the ambars on their properties, but the English companies' losses of crude appear to have been very insignificant. The Baku Russian Co. lost 124,000 poods, the Schibaieff Co. 105,000 poods, and the Russian Petroleum and Liquid Fuel Co. a little under 7,000 poods, while many firms do not figure at all among the list of those who have suffered by reason of crude oil losses. For instance, such firms as Messrs. Nobel Bros., the Moscow-Caucasian Co., Assadulaeff, the Bibi-Eybal Petroleum Co., and the European Petroleum Co. have sustained no losses in this direction during the disturbances in August last. As we say, these figures in the light of a few "details" made public at the time are very consoling.

January American Pipe Line Report.

The American pipe line report for January shews that during the month both pipe line runs and shipments shewed a decline, and consequently the decrease in the stocks of Pennsylvanian oil were not so great as was the case during the preceding months. Stocks of Lima oil at the close of January were a little over 12,400,000 barrels—the smallest on record since June, 1900. But while the stocks east of the Mississippi have declined nearly every month of the past year, in the Mid-Continent oil fields enormous gains have, as we have repeatedly shewn, been made. The stocks held by the Prairie Oil and Gas Co. at the close of January, which represent the surplus production of the Kansas, Indian and Oklahoma Territory producing regions, were nearly 14,000,000 barrels, which was more than the net stocks of the Lima-Indiana districts, and four times the amount of the stocks of Pennsylvania oil. In twelve months the oil stocks west of the Mississippi increased over 8,000,000 barrels.

The January pipe line runs of Pennsylvania oil averaged 71,740 barrels, or 3,243 barrels below the December record, while the total runs of Pennsylvania oil for the year 1905 were 28,043,987 barrels, or 76,833 barrels a day.

The shipments of Pennsylvania oil averaged 76,589 barrels a day for the month, which was a decline of 2,449 barrels from December.

In the Trenton Rock oil fields of North-Western Ohio and Indiana, the runs of the Buckeye Pipe Line Co. averaged 43,072 barrels a day during the month, these being the smallest on record since the February of seven years ago, while those a year ago averaged over 58,000 barrels daily. The shipments of Lima oil shewed a daily average of 64,044 barrels during the month, which was a gain over December of 1,000 barrels daily, and an increase of nearly 2,000 barrels daily upon the figures for the corresponding month of last year.

PETROLEUM TRADE OF BELGIUM IN 1905.

The imports of refined petroleum into Belgium in 1905 compared with 1904 were as follows:—

	1905. Tons.	1904. Tons.	1903. Tons.
United States	140,457	129,210	157,097
Russia	45,486	49,681	50,061
Roumania	5,000	12	76
Holland..	4,760	12,195	1,834
Other Countries ..	883	1,697	1,836
Total ..	196,586	192,795	210,904

The exports of refined from Belgium were as under:—1905, 36,567 tons; 1904, 30,209 tons; and in 1903, 29,155 tons. The net imports, after deducting exports, were therefore: in 1905, 160,019 tons, against 161,596 tons in 1904 and 181,749 tons in 1903.

MESSRS. NOBEL BROS.' ANNUAL MEETING.

The annual general meeting of Messrs. Nobel Bros. will be held at St. Petersburg on the 27th of February (o.s.), to consider the report and balance sheet for the past year and the estimates and scheme of operations for the coming year. The directors will ask for sanction to acquire some fresh petroliferous lands, and will also submit a report on the conditions of the petroleum trade abroad.

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 22nd February, 1906, as follows:—

Owing to increased quantities of plates being offered for early delivery, prices are again easier, and for March we make to-day's prices as under. For forward delivery works ask 3d. per box more:—

IC	$18\frac{3}{4} \times 14$	124 sheets	110 lbs.	13/- per box.
IC	$19\frac{1}{4} \times 14$	120 ,,	110 ,,	13/- ,,
IC	20×10	225 ,,	156 ,,	18/6 ,,

F.o.b. Wales. Tin lining and iron hooping extra.

LONDON OIL SHARE MARKET.

FRIDAY, FEB. 23RD.

Prices in the Oil Share group of the London Stock Exchange have a decidedly weak tendency, with the exception of Shell Transport and Trading Ordinary and Preference shares, both of which are strong and considerably in advance of the quotations in our last issue. For the week's fluctuations we revert to Saturday last, when Anglo-Russians were recorded at $\frac{1}{16}$-$\frac{1}{8}$, Assam Oil $\frac{5}{8}$-$\frac{7}{8}$, Baku Ordinary 3s. to 3s. 6d., Preference 6s. 9d. to 7s. 3d., Bibi-Eybats $\frac{1}{2}$-$\frac{5}{8}$, Debentures 88-93, Californian Oilfields $6\frac{1}{2}$-$6\frac{3}{4}$, European Preference $\frac{3}{16}$-$\frac{5}{16}$, Debentures 82-87, Russian Ordinary 14s. 6d. to 15s. 6d., Preference 13s. 6d. to 14s. 6d., Debentures 88-92, Schibaieff Ordinary 10s. 3d. to 10s. 9d., Preference $3\frac{3}{8}$-$3\frac{5}{8}$, Spies $\frac{3}{8}$-$\frac{7}{16}$, Shell Transport Ordinary 23s. 3d. to 23s. 9d., and Preference 9-$9\frac{1}{2}$.

On Monday there were no alterations from this list, but on Tuesday movements proved irregular, Shell Transport Ordinary rising 1s. 3d. to 24s. 6d. to 25s., and Russian Debentures being a slightly closer market at 89-92, while Russian Ordinary dropped 1s. 3d. to 13s. 3d. to 14s. 3d., and Californian Oilfields lost $\frac{1}{8}$ at $6\frac{3}{8}$-$6\frac{5}{8}$. Dealing was quiet on Wednesday, but Russian Ordinary recovered 3d. of the previous day's decline, closing 13s. 6d. to 14s. 6d. With Thursday's business Bakus were weak at 2s. 9d. to 3s. 3d., which was a decline of 3d. per share, and Spies lost $\frac{1}{32}$ at $\frac{11}{32}$-$\frac{13}{32}$. On the other hand, Russian Ordinary were in request and improved 6d. at 14s. to 15s., and Shell Transport Ordinary gained $\frac{1}{4}$ at $9\frac{1}{4}$-$9\frac{3}{4}$.

The fortnightly carry-over took place on Tuesday, when the volume of business to be adjusted proved exceedingly light. Some apprehensions as to the failure of several well-known firms caused general dealing to be very restricted, but happily only two small firms succumbed, and the market was very buoyant when anxiety was relieved on Thursday.

The rate of interest charged for Oil Shares was about 6 per cent. to 7 per cent., and a comparison of making up prices with those fixed at the mid-February Settlement discloses few alterations. Shell Transport Ordinary at 24s. 9d. marked an advance of 2s. 6d. per share, and Schibaieff Ordinary improved 3d. at 10s. 9d., while Russian Preference lost 1s. at $\frac{11}{16}$, and Spies 9d. at 7s. 9d. Anglo-Russians at $\frac{1}{8}$, Baku Ordinary at 3s. 6d., Preference at 7s., Californian Oilfields at $6\frac{1}{2}$d., and Russian Petroleum Ordinary at 14s. 9d. shew no change. Latest prices are given in full on page 152.

IMPORTANT PROPOSAL BY THE ROYAL DUTCH PETROLEUM CO.

The directors of the Moesi Ilir Petroleum Co., of Amsterdam, owning properties in Sumatra, have sent out a circular to the shareholders, in which they state that the affairs continue unsatisfactory. The company is not yet on a dividend-paying basis, whilst the working capital is beginning to give out. The Royal Dutch Petroleum Co. have made the following offer to the Moesi-Ilir Co. The Royal Dutch Co. undertakes to take over at least 20,100 shares of the Moesi-Ilir Co. of 120 florins each, or a total nominal value of 2,412,000 florins, or any larger number which the holders of at least 100 shares each may wish to part with. For every 100 shares of the Moesi-Ilir Co. of 120 florins each, the Royal Dutch Co. will issue one 1,000 florin share of its own.

The Baku Russian Petroleum Co., Ltd.

EXTRAORDINARY MEETING OF SHAREHOLDERS.

LIVELY PROCEEDINGS.

(SPECIAL VERBATIM REPORT.)

The extraordinary meeting of the shareholders of the Baku Russian Petroleum Co., around which so much interest was attached, took place on Monday at noon at Winchester House. The object of the meeting was to receive and consider the report of the committee which has been making an investigation into the allegations directed against some of the directors of the company by Dr. Dvorkovitz, and to determine whether any, and if so, what steps should be taken in consequence of such report.

Colonel IVOR PHILIPPS, M.P., chairman of the company, presided, and he was supported by a full directorate. In opening the proceedings, he said:—

Gentlemen,—You have all had copies of the report of the shareholders' committee covering the report of the sub-committee, and I therefore presume you will take the report as read. The reason why you are called together to-day is to consider that report. You may remember that at a previous meeting I undertook to call together a committee consisting of the 12 largest preference shareholders, the 12 largest ordinary shareholders, and the 12 largest combined shareholders, together with a number of gentlemen who have taken an active part in our annual meetings, to consider the question of the reorganisation of the company. Following that, certain serious allegations were made against the management of the company, and in a circular I addressed to you I informed you that this committee would be asked to go into those charges also. At the last meeting of shareholders that committee was approved and confirmed unanimously by you. That committee has appointed a sub-committee from amongst its members to go into these questions, and that sub-committee has now issued its report, which, I understand from a letter we have received, was accepted by the committee itself, and is now before you. Directly I received that report we considered it, and to carry out my promise to you that I should call a meeting of shareholders as soon as possible, we issued the notice convening this meeting, calling it at the earliest possible date. You have probably all read the report, and will notice that the committee have gone into all the allegations, and have treated all the matters concerning the past history of the company; but the committee have left the question of the future management of the company and the reorganisation of its capital for future consideration. Since this report has been issued the sub-committee have again met the directors on two occasions to consider the question of the reorganisation of the capital. I do not propose to go into the details of this report much myself, because it is a matter resting between you, as shareholders, and the committee which you appointed.

I would only say that in the circular that I addressed to you when these allegations were first made, I stated that I, as chairman, believed that the charges reflecting against the relations of this company with a member of the board and his firm were without justification; and I may say, as I am new to the company myself, I made that statement after having gone into all these matters as carefully as I could in the time at my disposal. Therefore, it is with great pleasure that I read in the report of the committee that the sub-committee have been unable to find any evidence to enable them to believe that any director has left the board, or that any director has left, or any new director has been placed on the board, through the influence of Mr. H. N. Gladstone. The sub-committee find that Mr. Dvorkovitz's allegations, that Mr. Gladstone used his position on the board improperly to promote his personal interests, are wholly unjustified. I think, therefore, that my statement to you, as chairman of this company, was perfectly justified. I cannot tell you what a pleasure it is to me to feel that these gentlemen have gone into this matter with such care, and have shewn that these charges against my friend, Mr. Gladstone, are without justification. I will leave the discussion of this report, as I say, to you and your committee, but I propose to move a resolution: "That the report of the shareholders' committee, as submitted to this meeting, be, and the same is hereby, received and adopted." I would remind you that, although we have some old members on the board, the majority of the board is a new board. I would remind you that the management of the company is a new management and that up to August last the condition of the company was improving daily; but, as you all know, unforeseen circumstances occurred in August and September which dashed our hopes to the ground for the time being; but the company is, I hope, weathering the storm, and daily and weekly our production is increasing. We are recovering the ground which we have lost owing to incendiarism, revolution, and labour troubles. The production before the troubles in September averaged 403,000 poods per week while working full time. In the week before the trouble it was 364,000 poods. Well, you have already had details of the production from that time until November 25th, but I may say it has gone on steadily increasing—from 206,000 poods in November to 250,000, 290,000, 267,000 poods in January, 272,000 poods on February 3rd, and 299,000 poods on February 10th—so that it is steadily rising. Then, as regards the re-organisation of the capital and the future management, as I say, that matter is receiving the most careful attention of the board at the present moment. We are discussing it freely with your sub-committee, and are quite prepared to put forward a scheme in due course which, I trust, will be approved both by the board and by the sub-committee, and, afterwards, by yourselves. I am not prepared to put that before you to-day, but may have to ask you to come together again shortly to go into the matter.

We have had since our last meeting an offer by a syndicate to lease our property. I am not in a position to say who and what the syndicate are; but the proposal was brought to my notice by one of our shareholders—a considerable shareholder—Dr. Whitty. I have seen the circular addressed to you by Dr. Whitty, so that you know, roughly, the terms of that proposal. All I can say is that the board were not prepared to accept and recommend you to adopt that proposal, and in this matter we were confirmed by your sub-committee. Before sending a reply to Dr. Whitty, I sent my letter to the chairman of the sub-committee to know if it met with his approval, and I was informed that it did. I am not quite certain whether the sub-committee approved of my reply; but Mr. Drew will inform you that he also communicated with Dr. Whitty on the subject. My own opinion of the matter, and the opinion of the board, is that if we did wish to lease our property, we could get better terms than those offered; but we do not consider that it is desirable to lease the property. I do not know whether it is necessary for me to go into that to-day, because the question of the re-organisation of the company is still under consideration; but I may say that that particular matter has received the most careful consideration of the board, and we were unanimous in our decision that we could not accept it. I will not detain you longer than to say, briefly, that I consider the continuance of this agitation against the board is very damaging to your property. ("No, no.") There is no doubt, while there is a question of re-organisation before you, that this constant agitation must, and does, depreciate your property—(hear, hear)—and I only hope, for your own sakes, that it will be put an end to. I now move the resolution, that the report be received and adopted.

Mr. LEA SMITH seconded the motion, and said he hoped that common sense would prevail at that meeting. He had money in the company, and in the other two Russian companies, and he certainly wanted to save what little there was left. He felt that if the present agitation were continued there would be very little left; and as shareholders they could not expect the company to do any good. He was very pleased the committee had investigated the charges made, and had come to the conclusions which they had submitted in their report. In times like the present they certainly did not want to swap horses, but, rather, to keep their friends together, because, in his opinion, there must in all these companies be very great financial arrangements made. There was no doubt that companies were formed on the basis of high prices and large profits, and it would be necessary now for great economies to be effected, and the companies placed on an entirely different basis with regard to their expenses.

Dr. Whitty said he rose to propose an amendment to the resolution before the meeting. He was the author of the proposal. the particulars of which the shareholders had received from him in his circular. But in moving that amendment he wished to explain why he was bringing it forward.

He ventured to say that in the course of his remarks he would be able to demonstrate to the shareholders that the committee had not acted in the interest of the shareholders, but had acted directly in the interests of the gentlemen who composed the board. When he spoke of the committee, he was particularly alluding to the sub-committee, for it was that section which conducted the investigation, and he had no hesitation in saying now that the board tricked the shareholders into the formation of that committee. They were no doubt all familiar with the trick which the conjuror played upon his audience, when he handed them a pack of cards and asked them to choose at random. (Voice, "Nonsense.")

Dr. Whitty: It is not nonsense.

Continuing, he said that the board ostensibly chose 36 of the largest shareholders, which seemed very fair on the face of it; but he ventured to assert that in the majority of cases the gentlemen eventually chosen were not *bona-fide* holders of shares—they held them in their capacity as directors of various loan and mortgage companies or as nominees or as security for advances, and he believed——

Amid considerable disorder, Mr. Lock said that, in his case at all events, it was an entire mistake, because his firm bought their shares in the usual way.

At this point, several persons attempted to address the chair, which caused the chairman to repeatedly call for order. Addressing the mover of the amendment, he pointed out that these were serious charges to make.

Dr. Whitty: I do not think they are serious charges at all. (Laughter.)

Another gentleman in the middle of the room rose to a point of order, but was ruled out of order, and amid considerable disorder the chairman appealed to him to sit down and not interrupt. The gentleman said he rose to a point of order, but did not want to cause interruption, he simply wanted to stop it, and he wanted to know if it was in order that when a shareholder was addressing the meeting he should be interrupted in such a way. He appealed to the shareholders to hear what the gentleman had to say.

The Chairman said he trusted the shareholders would give order, but he hoped that Dr. Whitty would not annoy the shareholders by casting aspersions on the gentlemen who formed the sub-committee.

Dr. Whitty said the point he wanted to make clear was that although they might be large shareholders they might not be *bona fide* shareholders, and he would have qualified his remark by that expression, had the meeting allowed him to proceed. As it happened, the sub-committee consisted of those gentlemen among others who were objected to at the last meeting by Dr. Dvorkovitz, on the grounds that they were likely to be prejudiced, as it was somewhat significant that one of those gentlemen was elected chairman of both committees. He desired to assert that members should be gentlemen who were absolutely unbiassed and impartial, but that, he ventured to suggest, was impossible in the the present case, for the reason that they were, everyone of them, directors of companies, and were, or had been, promotors of companies, and were termed financiers, and as such it could only be expected that they should stand one by another.

At this juncture the speaker was again interrupted by a member of the sub-committee, who said he challenged him to prove that he was in any way, or ever had been, what might be termed a financier.

Dr. Whitty said, if he were challenged, he would read particulars. (Cries of "Hear, hear," and "Absurd.") From the details he would give them, he would show that the members of the sub-committee could not be impartial. He would first take the case of Mr. Drew, who was chairman of the Eastern Mortgage and Agencies Co., and his firm had business with Mr. Gladstone's firm in the Far East, and therefore, he held, that gentleman could not be independent. Another gentleman on the committee (Mr. Austen) was a co-director with Colonel Philipps on the Governments Stock and Other Securities Investments Co.

Mr. Young, interrupting, said that all these matters were gone into at the last meeting, when Mr. Dvorkovitz objected to the appointment of Mr. Austin, Mr. Drew and himself to the committee; but the shareholders unanimously elected them. He did not think Dr. Whitty should be allowed to go over the same ground again.

The Chairman said the shareholders all knew how the committee was appointed; there had been no secret whatever made of it. They also knew that all those who were connected with the promotion or the previous management of the company, with one exception, did not accept the invitation. That committee appointed the sub-committee themselves, without reference to the board, and of Dr. Whitty did not know that it was his own fault, for he was one of the gentlemen asked to join the committee, not because the board had any previous personal knowledge of him, but because he had taken an active part in the meetings of the shareholders of the company. In reply, Dr. Whitty refused to serve, not for the reasons he had now given, but he said: "I must regretfully decline the invitation, not from any disinclination to serve on the committee, but solely because, through ignorance of business methods and customs, I feel that I could not be of any use whatever." He would only add that the members of the committee had given a great deal of time and trouble to the service of the company, and it was rather hard upon them for anyone to come there that day and wish to go into all those details of the subject. He then appealed to Dr. Whitty to be as brief as possible, for he did not think it was necessary to go into the details he was attempting to give. It was only necessary for the speaker to give his objections to the report of the committee.

Dr. Whitty said he would have concluded his speech long ago had he been allowed to proceed without interruption. It did appear very significant that the sub-committee had upon it the very three gentlemen who were objected to by Dr. Dvorkovitz. The character of the report issued by the committee was, in itself, evidence of their bias in favour of the board. A more lamentably inconclusive report, he ventured to assert, was never put forward, and it was a positive insult to their intelligence. Many points were omitted altogether, and they were given no information upon matters they ought to have had. For instance, no mention whatever was made of the reasons which justified the arrangement made with Mr. Gladstone's firm to pay them 2½ per cent. commission for doing work which it was customary to get done for one-half per cent. Nor was there any mention made or explanation given of why in 1900, with an output of 288,000 tons of oil, at 19s. 8d. per ton, there was a profit of £77,000, whereas in 1904, with an output of 423,000 tons, with identically the same price, there was a loss to the company of £51,000. The sub-committee had ventured to make one statement—presumably the mildest they could make—with regard to the management of the board, and that was to attribute the disastrous results obtained to the inadequate knowledge of the industry possessed by the board and also to the lack of the necessary working capital. That attitude was fairly exemplified by the committee's treatment of the scheme he put before them to lease the company's properties in January last. This, on the face of it, was an eminently favourable proposal, and one that deserved the fullest inquiry. Beyond a formal acknowledgment of his proposal he received nothing whatever from the committee, except a letter saying the committee had referred it to the board. Two days before the date on which the offer was to terminate he had an interview with Colonel Philipps. The board rejected the proposal on January 31st, and the committee, following suit, rejected it also; but the reasons given were contradictory. The board gave as their reason that in the scheme there were not evidences of sufficient guarantees for the due performance of the syndicate's obligations and of the conservation of the company's interest. The committee stated that the proposal was so far from reasonable that nothing could be gained by having an interview with him. Colonel Philipps, however, admitted to him that the scheme was a most advantageous one for the shareholders if the syndicate could fulfil their obligation. It was a question of guarantees —that, the chairman said, was the crux of the situation. He told the chairman that he had been assured that the syndicate could and would give all reasonable and satisfactory guarantees for the due performance of their undertakings, and he urged Colonel Philipps and the board to meet the representatives of the syndicate and go into the matter with them; for without doing so it was utterly impossible to ascertain whether the proposal was one that could be accepted or not.

If the syndicate and the board of directors of their company met, and it was found that the syndicate were not in a position to offer the necessary guarantees, then no one would be quicker than he would to object to the proposal. He was a large shareholder in the company, and as one who had not had one penny piece returned for all the money he had put into it, it was naturally to his interest that the company should be placed upon a sound basis. The shareholders had had a draft of the proposal placed before them in his circular, and he thought they would agree with him that there was everything to be gained by opening negotiations, for the syndicate were quite willing to meet the board of their company with regard to everything that was fair and reasonable. By the very large sum of money which the syndicate was prepared to raise among themselves, they had evidence of the fact that the members of the syndicate were not men of straw. Then they were prepared to pay over a large sum of money immediately as evidence of their good faith, and had the proposal gone through, and the syndicate had failed to carry out its undertaking, their company would have been able to have recovered possession of their property immediately with all the advantages which would have been brought about by the expenditure of the large working capital they were going to put into it. The company would be getting its rental in advance, and the syndicate would have had to wait until the company had been paid their rental before getting any return whatever for the money they had put into the undertaking. Therefore, if the worst came to the worst, the syndicate would lose, not the company. But the board of directors rejected the scheme off-hand without making any enquiry, and the committee who had charge of the investigation followed suit. The shareholders might wonder why they should have refused to go into the matter at all. He believed the reason was that the board and the committee were afraid that the syndicate would be able to offer such unimpeachable guarantees, that they would have had no other course open but to accept the offer. He wrote to the committee and requested that they should give him an interview, but this they refused him. He had no hesitation in saying that the board were acting against the interests of the shareholders. But he wished the shareholders to understand that he did not speak individually of the members of the board—he spoke of its *personnel*. They knew they had an exceedingly charming gentleman in the person of their chairman; in fact, had it not been for his charming personality, they would not have put up with the mismanagement so long.

But the reason why the offer of the syndicate was rejected was to his mind very plain, for if that scheme or a similar scheme were accepted by their company, then the management would pass from the board of directors. The directors would lose their handsome remuneration, and Mr. Gladstone and Mr. Leslie would lose the excessive commissions they had been receiving for marketing the oil, whereas by getting a scheme accepted which left the management still in their hands, things would go on as before.

A Voice: Are you interested in the syndicate?

Dr. Whitty: Yes, I am, because if the scheme goes through, I shall get some return from my money.

Proceeding, the speaker said that any scheme which would leave the management in their hands would necessitate an immense sum of money being raised, and that could only be done by a loan at a very heavy rate of interest—and in this case the debenture holders might have something to say—by selling a portion of the company's property as had been done before, or by levying an assessment. He had had a hint that the scheme which the board were preparing entailed the levying of an assessment. As they all knew, the effect of such a scheme would be to still further depress the value of the shares, many of the smaller shareholders would be unwilling to meet a call upon the shares, and consequently they would go at rubbish prices, and so be picked up by goodness only knew. To pay a call would be to throw good money after bad. In speaking about guarantees, he desired to ask what guarantees the directors of their company would furnish that they would be more successful in the future than they had been in the past. That they would be more successful was far beyond the range of probabilities.

The scheme that he had put before the committee and the chairman of their company provided all the required capital without the shareholders having to put their hands into their pockets for a single penny. Then, on the other hand, it provided regular dividends, plus a participation in the profits, and, moreover, it secured efficient management by experienced men.

A Shareholder enquired who the men were, and, in reply, Dr. Whitty said that at the present time he was not in a position to divulge names. He first wanted to know whether the scheme would be accepted. To reject such a scheme, however, without enquiry shewed that the committee, and also the board, were no longer worthy of their confidence.

As he had said, when men came forward who were prepared to put up £300,000, they were scarcely people of straw. But they were not doing that for philanthropic purposes. They knew how valuable the company's property was, and they were convinced that they could carry out their undertaking and make a handsome return for themselves as well. It behoved the shareholders therefore to appoint a new committee whose members would go thoroughly into his scheme and meet the representatives of the syndicate, and so discuss the matter in all its details, and then report to the shareholders. If the guarantees were satisfactory, he held that the shareholders would indeed be very foolish to refuse the offer.

It was their only chance for saving the situation. If the management were still left in the hands of the present board, the shareholders would be burdened with a heavier debt, they who had been unsuccessful in the past would certainly continue to be in the future, and the consequence would be that the company would be ruined. The chairman had pleaded in mitigation of the bad results for the past two or three years the fact that there had been almost continous disturbances in Russia. It was an extraordinary thing that during 1904, when those disturbances were going on in Russia, when their own company had huge losses, those companies managed by Russians—of 29 with a total capital of £11,000,000—earned a gross profit of nearly 17 per cent., and of those 29 companies, 11 yielded 15·76 per cent. net profit, after placing 12·5 to reserve. Yet they, on the other hand, made big losses. He appealed to the shareholders to receive the proposals which the board might bring forward with suspicion, and to be very careful lest a scheme to assess the shareholders lay hidden beneath the surface. In fact, they ought to say that the directors when they brought forward a proposal should give a guarantee that they would run the company at a profit. At all events, it behoved the shareholders to be chary in future as to giving proxies to the directors wholesale, for so long as proxies were given to the board, so long would the shareholders be absolutely in their power.

Concluding, the speaker said he thought he had said enough to convince the meeting that the committee had not acted with the best intentions toward the shareholders, but had acted in the interests of the members of the board. He would therefore move the following amendment to the resolution before the meeting:—

> "That in view of the present dissatisfaction among the shareholders, owing to the absence of dividends for the past five years, this meeting agrees in principle with the scheme of re-organisation as laid before us by Dr. Whitty, whereby guarantee dividends will be regularly forthcoming, and demands the appointment of a new committee to re-open negotiations on the lines suggested, the committee to report to a general meeting of shareholders before concluding any negotiations with the syndicate. This meeting further agrees that the report of the committee before us be not adopted."

Surgeon-General de Renzy said he had pleasure in seconding the amendment, and in the first place would like to say that he had known Dr. Whitty since his childhood. He had the highest opinion of him, and could assure the meeting that he was entirely worthy of their confidence. He had to admit that the report of the committee and of the sub-committee came as a great disappointment to him. He was one of the original shareholders in the company, and he took shares in the company being largely influenced by the great commercial reputation and high position of the then chairman (Sir James Kitson), and also he might say by the very high reputation and position of Mr. Gladstone.

Mr. Gladstone: And the other gentlemen on the board.

Proceeding, Surgeon-General de Renzy replied that the two gentlemen he had named were those whose names influenced him in investing his money in the company, in also putting his children's money in the company, his sister's money into the company, and recommending it to his friends as a concern well worthy of their investing money in it. Amongst others, he recommended Dr. Whitty, and it was a great disappointment to him to find that it was owing to Dr. Whitty's having acted on his recommendation that he was likely to lose the greater part of what he had put into the company. (Cries of "Shame.")

He was not going to enter into a minute criticism of the report of the committee, but there was one thing he would specially invite the attention of that meeting to. The committee had found that the main reasons for the failure of their company was the working capital being so small. Their board had entered upon that gigantic business with a working capital of only £50,000. To him it was simply amazing that a man of Sir James Kitson's commercial experience should have attempted to carry on such a gigantic business with such a small working capital as £50,000. But what was the work which their board agreed to do, as was shewn in the prospectus which he had before him.

In that prospectus there was no mention at all of the working capital of the company, and it seemed as if by some miracle the company was going to get on its legs and walk without the assistance of any working capital.

If he were, therefore, not trespassing upon the time of the shareholders too much, he would refer to one or two important matters mentioned in the prospectus, and upon which the shareholders subscribed their money.

Considerable interruption took place at this juncture, and it was only with difficulty that the speaker's words were caught at the reporters' table. Reading from the prospectus, the speaker proceeded:—

> "The average net profits for the three years were £126,737, and after deducting from that sum £5,000 for administration expenses in England, a balance would remain which would be sufficient for the declaration of a dividend of more than 11 per cent. on the ordinary capital, after paying the preference shareholders their fixed dividend, or nearly two per cent. as their additional share of the profits. For the last year of the three a profit was shewn sufficient to pay 7¾ per cent. on the preference shares, and 12½ per cent. on the ordinary shares, the usual dividend, therefore, being about three and a-half times covered. The steady advance in profits was likely to continue, for many wells which were being sunk were on the point of yielding oil, while the engineering experts promise better results from better methods; there is the prospect of a great saving in the local management, and there is plenty of room for new and extensive operations. (Laughter.)
>
> "Dr. Durneff shews that without having recourse to virgin lands, 80 more wells can be bored on that portion of the Arafelloff property now yielding oil, but assuming that only 20 new wells are put down out of the total number which can be bored on these lands, besides the 15 which are now being bored, the production of the lands which in 1897 (notwithstanding the want of technical supervision, the property being scattered, and the management being overburdened with other work), stood at 20,000,000 poods, will be increased to 35,000,000 poods or more, especially under proper management, and this does not take into calculation the possibility of striking fountains." (Laughter.)

The progenitors of that company put down those wells which were to give them that fabulous wealth, and for such purpose they set aside, out of the immense profits which had been made by the promoters, a sum of £50,000—a totally inadequate amount. That, in short, was the reason why their company had been such a blank failure.

Mr. Nesbit said that, as an ordinary shareholder, he was invited to join the committee of inspection because he had attacked the board at the meeting prior to the appointment of the committee, and he thought that was the guiding principle in the selection of members of that committee. He regarded it as a perfectly impartial committee, and might add that in the selection of the sub-committee they were most careful to appoint representatives of both ordinary and preference shareholders. With regard to Dr. Whitty's proposals he realised that, as an ordinary shareholder, he would be completely wiped out. The provision of £50,000 a year, which he was going to pay for rent, would not be sufficient, after paying debenture interest, to pay the whole of the preference interest. Therefore, the ordinary shareholders were simply to be wiped out. Then at the end of 10 years the company could buy for £650,000—a price which would not pay the preference shareholders. Under those circumstances, it was not conceivable that the preference shareholders would allow the ordinary shareholders to come in and participate. So far as the ordinary shareholders were concerned they had to reject the proposition. He fully sympathised with everything the seconder of the amendment had said; but submitted that it was exactly what the committee themselves had said in their report—namely, that the whole disaster of the company had come about because the original board only provided £50,000 for working capital, which was altogether inadequate. It ought to be carefully borne in mind that of the present board only two were original directors. They might be two too many, but it was for the shareholders to say. But it seemed to him that in all their attacks they ought to remember that Colonel Philipps and Mr. Hogg had nothing to do with the disasters consequent upon the contract with the Russian Petroleum and Liquid Fuel Co.

Mr. Barber, as a member of the committee, said he considered it unfortunate that Dr. Whitty should have made a statement without any knowledge of the facts. At the first meeting the board intimated to the committee that they were prepared to go out and allow them to select a sub-committee themselves, and the committee did, as a fact, select their own sub-committee. With regard to the question of promotion, there was no doubt that there had been a very large promotion profit; but those who were original shareholders had the prospectus before them when they subscribed, and he was informed by Mr. Lock (a member of the sub-committee) that he had gone very carefully through the prospectus to see if there were any mis-statements of facts, and he was informed there were none, excepting perhaps one referring to the sinking of one well. But with regard to the omission of facts, which they might or might not have known, he had questioned Mr. Lock with a view to seeing whether the agreements under which the promoting profits came were disclosed on the face of the prospectus, and Mr. Lock had told him that he found they were so disclosed, and that any person of reasonable intelligence, upon reading the prospectus, would have seen where he could go to inspect those documents. Any shareholder who desired could have seen that large promotion profits were being made, if they so desired to see. It was, of course, unfortunate that such things had happened, but an original shareholder could certainly not have any feelings against the present directorate. With regard to the management, he took a very strong view when the committee met as to the position of the general manager and one of the directors. It was a well-known principle that a man could not act in these matters in a dual capacity. If he were acting in a fiduciary position in the company he could not at the same time have a pecuniary interest which might induce him directly or indirectly to enter into contracts and engagements with the company. He was aware that the legal position was quite sound; but he was informed both that Mr. Tweedy, under his agreement, had the power to take a brokerage, and that Mr. Gladstone, who was a member of the firm of Messrs. Ogilvy, Gillanders and Co., was entitled to allow that firm to enter into business transactions with the company. But he maintained that this should not be. There ought to be no possible bias which would influence the minds of those controlling the affairs of a public body like theirs, so that they might be inclined to engage in business or enter upon contracts. He had no doubt whatever that Mr. Gladstone acted in a perfectly honest and *bona fide* manner; but the shareholders could see for themselves that the company was in a most deplorable condition. With regard to reconstruction, it was for them first to see whether they could by any means get an efficient board of management. He did not think it would suit their purpose to stint in the matter of fees, providing the gentlemen in charge of the management would co-operate with the local manager in Russia. If they would go out to Russia two or three times a year and go into the whole details of the business, the company might be pulled round; but if they could not get an efficient board of management then reconstruction would be perfectly useless. What possible chance was there of wiping out the enormous debit balance and the arrears of preference dividend while they were carrying on the business as at present? If the preference and ordinary shareholders could come to some decision whereby, in consideration of the preference holders giving up their arrears of dividend, they should agree to reduce the value of their shares by 10s., that would really make no difference. If they could get an efficient board of management, then by all means re-construct; but that was a matter for the general body of shareholders. If they had no possible chance of getting a capable board of management, then they should entertain some proposal to get rid of the property for the best price they could.

Dr. Whitty said he rose to point out to the shareholders that the scheme submitted by him did not wipe out the ordinary shareholders. The former speaker had put forward a very misleading version of the proposal. It had been borne in on him that it was impossible to devise any scheme of reconstruction which would enable the company to continue to be managed by themselves with any reasonable degree of a profit being realised, and, on the principle that half a loaf was better than no bread, the proposed scheme recommended itself to him, because it did provide some return, and the possibility that if the syndicate were very successful, as they believed they would be, and they had backed up their opinion by a large sum of money, then the shareholders would get a dividend which, with the £50,000 rental, would give them a handsome return on their holding. The £50,000 rental would meet all the debenture obligations, and very nearly give 2½ per cent. to the ordinary shareholders and preference shareholders at par value; but if the capital were reduced to about half there would be almost five per cent. return out of the rental alone, without taking into consideration their share of the profits that would be made by the syndicate. The repayment of the loan would be made by instalments extending over ten years, or such shorter period as the board might like to arrange, and he had no doubt that the syndicate would allow the loan to be repaid, not by deductions from the rental, but from the share of profits that would come to the company. That was his belief, but he was not authorised to say so officially. As their company was weighted down at present, there was no way of raising money except by assessment.

Mr. Young said that, as a member of the much-maligned sub-committee, he would like to dispose of the red herring introduced by Dr. Whitty. He had before him a copy of Dr. Whitty's original scheme; but in the printed circular he had omitted some very important items. He talked of a syndicate with a capital of £350,000, but he had forgotten to state that of that £350,000 £50,000 in shares would go to the promoters of the syndicate as their profit. Then he had talked about the syndicate risking their capital; but in another paragraph he said he gave the shareholders of the Baku Co. an opportunity of investing half the amount if they chose to do so. The only other item he need refer to—for, in his opinion, the scheme was not worth considering—was where Dr. Whitty talked about advancing £100,000 to the company on loan at 6 per cent.; but he omitted to say what he said in his original letter—that the £100,000 was to be considered on account of rentals to be received; so that in the first two years the rental of £50,000 would go in return of this £100,000. Dr. Whitty said, further, that the syndicate would be prepared to provide an additional £200,000 working capital; but that was not in the original proposal.

Dr. Whitty: You are very much mistaken.

Dr. Dvorkovitz, in supporting the amendment, said:—

Ladies and Gentlemen,—It seems to me that your chairman and myself are for once in harmony, not on all the points, but on some of the points which he has mentioned about the committee report, and some of the points he has not mentioned.

I may say that when I commenced my agitation with regard to the management of your company, I was immediately met by the chairman sending out circulars to you, saying that I was wholly unjustified in my attacks on the board and on the management of the company.

As a result of my agitation, a committee was appointed by the board to investigate this question—I say by the board, because the shareholders have all been told by the board: "Here are 36 gentlemen. If you wish, you can take them, if not, you will have none."

As representing some 800 shareholders, I felt that it was much better to have half a loaf than none at all, and although the committee might be biassed, still when they meet facts and consider them, they must come to the same conclusion, and I am pleased to say that on many points which I have made in my attack, they absolutely agree with me.

With regard to the profits made on the promotion, they distinctly shew that £330,000 have been made, and, moreover, that £103,000 went into the pockets of Mr. Gladstone and his firm.

At the last meeting we have had Mr. Peat, who had inspected the books, but what he said is now proved to be absolutely untrue. He said he inspected the books and found £81,500, and so he seems not to have seen that particular item of £21,500. But why has he not seen this £21,500?

At the last meeting, Mr. Gladstone wrote a letter—a letter, mind you, not made a statement, when a man may sometimes make a mistake—and in that letter he has stated that he had no share in the management of the promotion syndicate. But, what do we find? We see that Mr. Gladstone and his firm have received one-half, viz., £21,500, which was for management of the promotion syndicate, so that when he told you he has had nothing to do with the promotion, I say he had told you an untruth. My contention all along was that he has been the Alpha and Omega of this company.

From the beginning he has appointed the directors, and I should like to know if the committee have enquired into this? How was it that Sir James Kitson—a most honourable man, as everyone knows—came to this company? Was he not invited by Mr. Gladstone and his friends? Then how came Mr. Hubbard (his cousin) to the company? Was he not invited also? And how came Mr. Moore (his ex-partner) to be a director, if he was not invited by Mr. Gladstone? I maintain that every director of the company has been invited by Mr. Gladstone. It is Mr. Gladstone who has been the chief promoter of your company, and he has used his influence to bring you to the disastrous position in which it is to-day. They claim that I am responsible that your property is reduced to its present value. This is the grossest mis-statement possible, and I must repudiate it. They have brought your property into the position in which it now stands, because they were dealing in your shares, and they were reducing the value of your shares in order to buy cheap and sell dear. Your committee has found that the £50,000 which was put aside for working capital was totally inadequate, but why have they not said it was due to the greediness of the promoters. They ought to have provided a working capital of £200,000, and I contend that they ought to have done this, and instead of taking £400,000 for themselves, taken £200,000. Had they done this, your shares would have been worth £3 to-day and not 3s.; and so when they tell me I am the cause of all this it is more than I can accept.

Now about contracts. They have stated that I was wrong when I said that they have disposed, against your interests, of the production of your company to the Russian Petroleum and Liquid Fuel Co., but upon this point the committee say that, "the surrender to the Russian Petroleum Co., under contract, and the entire control of the disposal of a large proportion of the company's output was a serious error." Therefore I ask, was I right to start this agitation or not?

With regard to the 2½ per cent. commission paid to Gladstone's firm, the committee have had the original correspondence between Mr. Gladstone and Mr. Tweedy, and they have seen that in March, 1903, when Mr. Tweedy was receiving one-half per cent., Mr. Gladstone's firm came forward, and agreed to do the same for 2½ per cent., Mr. Gladstone arranging to give Mr. Tweedy one-half per cent. to do the work saying, "and I shall then pocket the other 2 per cent." Here is a man who has made, on the promotion of your company, £103,000; he has made vast commissions; and, would you believe it, he still desires to get the last farthing from you.

I am pleased to say that owing to this agitation, I have at last brought money into your pockets, or at any rate prevented the board drawing a regular salary, for during the past five years, when you have not been receiving a single farthing, it has never occurred to the board not to draw their full salary; and until September last they have drawn £1,000 per quarter.

I would remind you that Mr. Verner, who has also been one of the promoter, but who has not had so much money out of the company as Mr. Gladstone has, at one time returned the cheque he had received, for he said that he could not take it so long as the shareholders have no profit. Again your committee has found it necessary to put the management both in London and Baku upon a more economical and independent basis. But why do they think so? Why do they not give us reasons for coming to that conclusion? Surely they know why? They say distinctly that the misfortunes of the company have been largely due to the attempt to handle a new business without adequate knowledge, with insufficient working capital, and with working expenses based upon the hopes of large profits which have never been earned.

When I objected to some of the members of the committee at the last meeting, I had in view the fact that some of them were in business relations with the board, but the shareholders thought that did not matter much. Still I thought the shareholders should not have appointed men to investigate the actions of the directors when those gentlemen were also engaged in the business of promotion. As I stated then, I find that four members of that committee represent four financial companies who are engaged in the very same transactions as we accuse your board of doing. They are floating companies in order to enrich themselves, and consequently these are the last people who should be appointed upon a committee when they themselves are financiers or company promoters. One gentleman is connected with the Eastern Mortgage and Agencies Co., another with the London Trust, a third is director of the Omnium Investment Co., and another is one of the directors of the United States Debenture Corporation. These gentlemen can, therefore, never be in sympathy with the shareholders, because they have done it themselves.

Mr. Barber: That is a gross mis-statement.

Dr. Dvorkovitz: That does not matter; it is my opinion. Although I have not had much time to get my proxies together, for I only received my circular on Monday last, I have been able altogether to present 470 proxies, and I have an additional 100 proxies that have been too late to be lodged. Therefore, I am certain that if I had had time I should have shewn that the majority of the shareholders are against the present board of directors, and it is time that at least those gentlemen who are responsible for all the disasters which have overtaken the company should resign. (Cheers). I specially refer to Mr. Gladstone and Mr. Moore. (Renewed cheers).

These are the original directors, and the board ought to be free from them. You perhaps do not know that there are 872 widows who have invested their money in this concern: they have been carried away by such names on the prospectus as Sir James Kitson and Mr. Gladstone, and now their money has gone. What I say is that these original directors of the company now on the board must resign, and they will resign if there is one spark of honesty left in them, and so let the new board be able to say that they are not associated with those who carried through the promotion. Then let them work the company so that it may be successful. Your property is very valuable, and with proper management it can be made to yield profits, but this is impossible when you are in the hands of a promoter who has 56,000 shares, for which he has paid nothing. If you like, I can shew you letters from widows who have put their last farthing into this company; and so I appeal to you, is it not time for Mr. Gladsone and Mr. Moore to resign, and the directors work the property for your benefit?

Mr. A. H. Drew said it would be difficult for him to correct all the mis-statements that had been made at that meeting concerning himself and the company he represented. First, the company he represented had never promoted a company, and never would, having nothing whatever to do with that class of business.

Unfortunately, his company took shares in the Baku Co., though its business was really the investment of money in the Far East, in India, and the Straits Settlements. The question for the shareholders was whether, having heard the letter which Dr. Whitty wrote to the chairman, they were prepared to accept his advice rather than that of the committee and directors. The shareholders were asked by Dr. Whitty to have no confidence in either the board or their own committee, but to have explicit confidence in somebody who had yet to be named. He had always understood from the circulars issued by Mr. Dvorkovitz that he wanted a total change in the management—that his desire was to get rid of the whole board—but now he told them it was only two members of the board that he wanted to get rid of.

Dr. Dvorkovitz: Well, that will be a total change.

Proceeding, the speaker said that was a matter which was entirely in the hands of the shareholders. The committee had no other interest than that of the shareholders in general. They simply happened to be large shareholders, and they had given a large amount of time to the affairs of the company; but the thanks they were getting for it had been a considerable amount of personal abuse. The question was whether the shareholders would do what the committee thought was likely to be for the benefit of the company or whether they would be advised by people with a very small holding in the company, or possibly no holding at all, and who possibly had other objects in view.

Dr. Dvorkovitz: I hold proxies for £180,000 shares.

Continuing, Mr. Drew said the committee were asked to report upon what had happened, and they had done so fairly. The shareholders were just as well able as the committee to say whether £100,000, or some other figure, was an excessive promotion profit. They surely did not want the opinions of the committee upon such a question. The committee had given the facts and it was for the shareholders to consider them.

A Shareholder expressed the opinion that Dr. Whitty's proposal was worthy of consideration. He had heard all the remarks made for and against, and he thought the proposal was a way out of the present difficulty. Personally, he thought the company could not carry on with the present management.

Mr. Beverley said that if, as Dr. Whitty has said, it was absolutely impossible that the company could be able to recover its position, except by a very large assessment on the shares—and that was the inference he gathered from that gentleman's observations—then the question was whether the offer which Dr. Whitty had put forward had received that serious consideration which it ought to have done from the board. So far as he was able to understand, even from the chairman of the company and the committee, the scheme had not received the careful attention it ought to have done. They were all in great doubt as to whether they would ever be able to overtake those arrears, and so the point was whether it was not worth while in the interests of the company and in the interests of the shareholders to seriously re-consider the offer, and find out what there was in it, and then report to a subsequent meeting. In view of that he would suggest to the meeting that the report which the sub-committee had presented should be received but not adopted.

The Chairman pointed out that the question of the future management and the re-organisation of the company was still under consideration by the committee, and so in adopting that report it did not prevent the committee going forward with their work.

Mr. Beverley said that from the opening speech of the chairman he had given them to understand that they would be called together subsequently to another meeting, and he also gave them a very broad intimation that they might be asked to agree to an assessment.

The Chairman replied that he never hinted such a thing. The question of an assessment had been put before the meeting by Dr. Whitty. It was he who had first mentioned the question of an assessment, and put the words into the directors' mouths.

Mr. Austen said that he should like to give his views of the proposal of Dr. Whitty. As a member of the sub-committee, he wished to say that the proposition received consideration; but, personally, he thought the offer was totally inadequate, and therefore voted against it. If the proposed rental had been £100,000 a year, instead of £50,000, the offer would have been worthy of consideration; but an offer of £50,000 was no use whatever to the company. With such a rental as that, for the first six or seven years the whole amount would have to be applied to the repayment of loans and interest on loans, and so he estimated that it would be something like six or seven years before the preference shareholders received any dividend. Then it was proposed that there should be an option to purchase the property for £650,000; qut he did not consider that, if that number of golden sovereigns were tendered at the moment for the property, it would be well to accept the amount. The whole of the information which had come before the committee went to shew that such a sum would be entirely inadequate. If Dr. Whitty would raise his offer to £75,000 a year, with an option to purchase at £1,000,000, it would be worth considering; but he did not consider that less than £1,000,000 should be accepted. It must be borne in mind that the present time was the very worst time for selling such a property. There were plenty of people who wanted the property, and were prepared to pay a good price for it; but they would not come forward just now, because they hoped the company would go under, and the property would drop into their hands like a ripe apple. All the company had to do was to hang on, and they would get a price for their property which, he thought, would surprise many even of the shareholders. The present market price of the shares in no way represented the intrinsic value of the property.

Dr. Whitty said that both Mr. Drew and Mr. Austen had given an entirely misleading idea of what his proposal was. The offer was that there should be a rental of £50,000 a year, plus 20 per cent. participation in the profits up to £25,000 and 40 per cent. of all profits exceeding that sum, with the option to obtain the property at the end of 10 years for £650,000, or a renewal of the lease for a further 10 years. The company, however, were to retain the right of deciding which they would grant. If the syndicate wished to buy, the company need not sell; but they must give either a renewal of the lease or they must sell.

The Chairman said that, before putting the amendment, he wished to say a word or two about Mr. Gladstone. When he (the chairman) joined the board, about a year and a-half ago, Mr. Gladstone offered to resign. He knew nothing whatever of Mr. Gladstone at that time except by name, and that gentleman had nothing to do with his joining the board. He asked Mr. Gladstone to stay on, however, because he considered that gentleman's knowledge would be most useful to the board. At the last meeting Mr. Gladstone was unanimously re-elected, and that was only a few months ago. The shareholders then had an opportunity, had they wished, of removing him from the board. He regarded Mr. Gladstone as a valuable director, and could assure the shareholders that his firm had nothing whatever to do with the company's trading concerns at the present moment, nor would they have in the future, so far as he was concerned. He hoped they would retain Mr. Gladstone on the board; but that would be for the shareholders to decide when he came up for re-election again. Mr. Dvorkovitz had charged Mr. Gladstone with receiving commissions, which practically amounted to a charge of fraud, but he (the speaker) maintained that the committee had distinctly found that those charges were wholly unjustified.

The amendment, upon being put, was negatived by 28 votes to 15, and the resolution was carried by 26 votes to 22.

The meeting then terminated.

ITEMS FROM ROUMANIA.

The production of the Steaua Romana is now increasing and the management of the company are endeavouring to make arrangements to enable them to market larger quantities of their products than they were able to do last year.

* * *

Well No. 6 of the Steaua Romana at Baicoi has struck oil, and yields about 30 tons daily.

* * *

The production of the Moreni field is increasing. Three wells of the Campina-Moreni have recently reached the oil stratum—namely, Nos. 8, 12 and 13. After the boreholes have been cleared of sand it will be possible to ascertain the yield of each of these wells.

* * *

The borehole of the Moreni Co. continues to yield considerable quantities of oil.

* * *

Messrs. Rucareanu and Co. have commenced drilling at Moreni. The work is conducted by Mr. Kiriloff. The Credit Petrolifer are likewise to drill a well at Moreni shortly.

* * *

The production of the Telega Oil Co. is increasing steadily, and has now reached 200 tons daily.

* * *

In Roumanian petroleum circles the idea is now discussed of forming a company for transporting petroleum in private tank waggons. Such a company is assured of the support of large foreign engineering firms, and the idea is also favoured by the Roumanian Government.

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Saturday, February 24th, 1906.

THE WORLD'S PRODUCTION OF PETROLEUM IN 1905.

Even at this early period of the year, we are pleased to be able to furnish our readers with reliable data concerning the total production of petroleum throughout the oil fields of the world for the past twelve months. Until last year, those interested in the petroleum industry were unable to obtain approximate figures of the world's petroleum production prior to the publication of the statistical governmental records – generally in the latter half of the year—but the necessity which existed for the more expeditious compilation of the details was self-evident, and thus we kept the records of the operations in the various fields, and a few weeks after the close of the year, we were able to present to our readers the detailed figures of the production in the various countries. The publication of that statement fulfilled such a long-felt want that we decided that it would be henceforth the duty of the Review to publish such important details of the world's oil field operations at as early a date as possible. Thus we feel sure our statistical data and our comment upon the production of petroleum during 1905 is bound to be appreciated.

Last year the petroleum fields throughout the world produced approximately 26,883,000 tons of crude oil, apart from the very small percentage consumed as fuel at the wells. During the preceding year—1904—the total output reached record figures, as the annexed table will shew, and by almost 3,000,000 tons exceeded the production of oil during 1903.

It will undoubtedly come as a surprise to many to find that in spite of the greatly increased activity which has characterised operations in many of the important fields, the total yield falls considerably below that of the previous year, but when the conditions which clouded the Russian industry are recollected, it will, we venture to think, be admitted that the figures are very gratifying.

Year after year, the demand for petroleum and its products comes from a more extended market. In the past, the supply has made even more rapid strides than the demand, and, though for the year 1905 production has taken a step backward, the circumstances which have brought that about are of that nature as to cause the slightest apprehension that the search for or the production of petroleum is on the decline.

Before going into comparisons, or referring to the circumstances which have led up to either an increase or decrease in the respective petroleum producing countries, we will give the production of each during the past year. This was as under:—

Producing Country.	1903. In Tons.	1904. In Tons.	1905. In Tons.
America ..	12,557,000	15,000,000	17,000,000
Russia	10,320,000	10,600,000	6,500,000
Sumatra, Java, and Borneo..	830,000	1,000,000	1,200,000
Galicia	713,800	827,000	800,000
Roumania ..	384,300	455,000	568,000
India	325,400	404,000	465,000
Other Countries	250,000	250,000	350,000
Total ..	25,380,500	28,536,000	26,883,000

From the above figures, it will be noted that America not only maintains its lead as the greatest producing country in the world, but continues to advance at a rate which far surpasses that of any other country. During the past year its productions may be approximately taken at 17,000,000 tons, or 2,000,000 tons in excess of the figures for the preceding year.

A sub-division of the American producing fields brings into prominence the fact that while remarkably rapid headway has been made in the development of the fields west of the Mississippi, the regions of Pennsylvania, West Virginia, Kentucky and Tennessee—or, in other words, the fields supplying high grades of oil—are constantly declining in their output. As we have already pointed out, however, the decline above-mentioned is counteracted by the results which have attended the developments in the newer districts of the west.

The territories comprised in the mid-continent field have more than doubled their yield of 1904, while in California, the increase in production for the past twelve months amounts to nearly 1,000,000 tons. Texas has also made much progress during the past year, and in spite of the decline in the production of such districts as Batson and Humble, the increase from these fields may roughly be taken at one and a-half million tons.

The above comments upon the production of the American fields forcibly indicate the fact that the centres of the oil production have shifted during the past few years, and new territories, by reason of rapid development, have gone to swell the enormous production with which the American producing fields are now credited.

Year by year America is strengthening its hold upon the consuming markets of the world, and whereas last year, its output of crude petroleum formed over 52 per cent. of that of the whole world, its last year's production is roughly 65 per cent. of the world's total yield. It is of course almost idle to forecast the result of this year's efforts in America, but it is safe to say that the events so far prove that another great advance will be made in the production of petroleum, and the present figures exceeded.

In regard to Russia, we see an enormous decline totally brought about by the unfortunate disorders, which from the commencement to the end of the year overshadowed the petroleum industry, and during a number of months caused its complete stagnation. This decline of about 4,000,000 tons was such that it was improbable from the first that any other producing field could counteract its effect.

If in Russia the petroleum industry had been blest with normal conditions, then the total production for the world would have created another record, for the approximate total would have been as great an advance upon the figures of 1904, as those of 1904 were upon those of 1903. Now, however, with the restoration of activity in and around Baku, it is to be hoped that the constantly disturbing features are now a thing of the past, and given this, the production from the Russian fields during the present year is bound to be considerable in excess of past figures.

Third on the list of producing centres, we get the Dutch Indies — including the producing regions of Sumatra, Java and Borneo—with a united production that can be placed at 1,200,000 tons. The advance here may not appear to be so large as might have been expected, but when it is borne in mind that apart from the eminently successful operations of the Nederlandsch Indische Industrie en Handel Maatschappij, the other producing companies have not been progressing from the point of view of increased production, the total figures of the Dutch Indies are highly satisfactory. It is in these regions that we may in the future expect to witness remarkable developments, for with the increased refinery capacity, and the various extensions of plant which have been completed quite recently, the prolific territories will no longer remain, as it were, pent up.

Space does not here permit our dwelling upon the progress which the other producing countries are making, excepting to say that in Roumania and Galicia a representative export organisation is badly needed, and it is this that in the case of the latter has of late retarded operations. Almost in every case, however, the evidence clearly indicates the extent to which the petroleum producing industry has become a great commercial factor in every quarter of the globe. New fields are being opened out, and in the light of recent experience, others which have in the past not been thought worthy of active development, are yielding encouraging results.

In this article we have only briefly dealt with the production of petroleum throughout the world during the past year, irrespective of either quality or value, but we hope to return upon another occasion to these phases of the subject.

THE ROUMANIAN PETROLEUM INDUSTRY IN 1905.

A FEW DETAILS OF PRODUCTION.

The production of crude oil in the Roumanian oil fields for the past year is dealt with in the latest issue of the *Moniteur du Petrole Roumain*, wherein considerable statistical data is given concerning the subject.

The total production of crude oil in 1905 amounted to 614,870 tons, as against 500,561 tons in 1904, shewing an increase of 114,319 tons, or about 22 per cent. This increase although substantial in itself, can scarcely be considered very satisfactory in view of the great efforts which were made during the year for the development of the Roumanian petroleum industry.

The production of the different fields in 1905, compared to 1904, was as under :—

	1904. Tons.	1905. Tons.
PRAHOVA DISTRICT—		
Bustenari..	331,860	411,407
Campina-Poiana	109,269	94,860
Moreni	4,349	47,243
Baicoi	2,145	1,949
Tinta	4,100	7,412
Recea	1,584	2,690
Other Fields	2,047	2,738
Total for Prahova	455,354	568,299
DAMBOVITZA DISTRICT—		
Gura-Ocnitza	19,619	17,294
Colibasi	4,752	4,216
Glodeni-Badislavoia	1,680	2,955
Other Fields	183	238
Total for Dambovitza	26,234	24,703
BUZEU DISTRICT—		
Sarata	7,975	12,254
Other Fields	853	650
Total for Buzeu	8,828	12,904
BACAU DISTRICT—		
Various Fields	10,145	8,974
Grand Total	500,561	614,880

This increase has occurred solely in the Bustenari and Moreni fields, which together shew an increase of 122,341 tons. The other territories have either declined or remained stationary during the year.

The progress of the production month by month in 1905 is herewith shewn in the following table (in tons) :—

	Prahova District.								
	Bustenari.	Campina.	Moreni.	Other Fields.	Total.	Dambovitza.	Bacau.	Buzeu.	Total.
January	28,545	7,187	1,874	720	38,326	2,222	649	889	42,086
February	30,197	8,007	1,094	1,159	40,457	2,023	529	844	43,853
March	30,366	8,640	1,130	1,170	41,306	2,250	644	984	45,184
April	31,218	9,264	1,567	1,147	43,196	1,930	813	999	46,938
May..	34,021	6,869	2,387	1,396	44,673	2,183	859	937	48,652
June	34,982	6,632	2,390	1,474	45,471	2,562	792	1,300	50,132
July ..	36,508	6,927	2,423	1,185	47,043	2,134	617	1,416	51,210
August	34,725	9,795	3,400	1,220	49,140	2,033	868	1,153	53,191
September ..	33,670	6,707	8,491	1,063	49,931	1,669	770	1,128	53,498
October	39,910	9,454	7,618	1,643	58,625	1,941	820	1,111	62,497
November ..	38,851	7,732	9,112	1,171	56,874	1,984	834	1,097	60,789
December ..	38,414	7,646	5,757	1,423	53,240	1,772	779	1,046	56,837
Total	411,407	94 860	47,243	14,784	568,289	24,703	8,974	12,904	614,870

The number of various wells in the Roumanian oil fields at the end of 1905, compared to the end of 1904, are given below :—

Districts.	1905. Hand Dug Wells.			1905. Borings.			1904. Hand Dug Wells.			1904. Borings.		
	Abandoned.	In course of Sinking.	Producing.	Abandoned.	In course of Drilling.	Producing.	Abandoned.	In course of Sinking.	Producing.	Abandoned.	In course of Drilling	Producing.
Prahova	723	70	276	142	197	276	685	105	332	114	95	167
Dambovitza	145	21	93	10	13	10	90	28	94	3	8	8
Buzeu	168	16	67	28	—	8	160	40	49	9	3	6
Bacau	194	26	244	42	5	46	194	2	268	22	1	39
Total	1,132	133	680	222	215	340	1,129	175	743	148	107	220

The number of wells in the three principal fields—Bustenari, Campina and Moreni—is shown below :—

	1905. Hand Wells.		1905. Borings.		1904. Hand Wells.		1904. Borings.	
	Producing.	In course of Sinking.	Producing.	In course of Drilling.	Producing.	In course of Sinking.	Producing.	In course of Drilling.
Bustenari	211	57	193	128	278	88	114	70
Campina..	9	5	46	32	9	—	40	22
Moreni	—	—	6	26	—	1	1	—

The condition of the properties of the leading firms as shewn in the number of borings owned by them at the end of 1905, compared with the end of 1904, was as follows :—

	1905. Producing.	1905. Drilling.	1905. Abandoned.	1904. Producing.	1904. Drilling.	1904. Abandoned.
Steaua Romana	105	66	75	87	27	52
Bustenari Co.	33	22	—	12	7	—
Telega Oil Co.	32	8	21	26	12	16
International Co.	14	12	6	15	4	2
Campina-Moreni Co.	3	6	13	4	1	14

The output of the leading firms in the fields is given upon the next page of this issue.

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{11}{16}$-$\frac{13}{16}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	2/9-3/3
,, ,, ..	£650,000 5½% Pref.	£1	6/9-7/3
Californian Oilfields	£250,000 Ord.	£1	6¼-6½
European Petroleum.. ..	£550,000 Pref.	£1	3/0-4/0
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	80-85
Russian Pet. & Liquid Fuel ..	£500,000 6½% Pref.	£1	13/6-14/6
,, ,, ...	£600,000 Ord.	£1	13/0-14/0
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	3½-3¾
,, ,, ...	£575,000 Ord.	£1	10/0-11/0
Shell Transport & Trading ..	£2,000,000	£1	24/6-25/6
,, ,, ,, ..	£1,000,000 Pref.	£10	9¼-9½
Spies Petroleum Company ..	£312,500	10s.	7/0-8/0

SCOTCH COMPANIES.

Supplied by Messrs: Maclean and Henderson, Stirling.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. 8½ pd	£199,750	£10	17½
Do. 6% Cum. Pref. ..	£100,000	£10	12½
Burmah Oil, Ord.	£1,100,000	£1	57s. 3d.
Do. Pref.	£250 000	£1	26s. od.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	8½
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	18
Do. New (£8 10s. pd.)	£131,750	£10	16¼
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	81s. od.
Do. 6% Cum. Pref.	£100,000	£10	12⅞
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	35s. 6d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	64s. 6d.
Do. "B" Deb...	£150,000	£100	147

RUSSIAN COMPANIES.

Company.	Nom. Value in Roubles.	Quotations on Feb. 18.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	473	481
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	4,050	4,100
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	- -	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	173	175
Neft Co.	250	—	—
Nobel Bros.	5,000	8,650	8,750
,, ,, ...	250	—	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

DUTCH COMPANIES.

Company.	Quotations Feb. 21st.	Quotations Feb. 14th.	Florins.
Arnhemsche Petroleum Mij. ..	80	80	1,000
Dordtsche Petroleum Mij. (Pref.) ..	126	126	500
,, ,, ,, (Deb. 4½%)	102¼	102¾	1,000
Elzasser Petroleum Mij.	2¼x44%liq	45	1,000
Gaboes ,, ,, ...	19¾	19¾	—
Holl. Rumeensche Petroleum Mij...	24½–24⅞	24	1,000
Int. Rum. Pet. Mij.	89	89½	500
Java Petroleum Mij...	30	30	1,000
Koninklyke Nederl. Pet. Mij. Shares	472–479½	448¼–452	250-1,000
,, ,, Share certificates	478–480	450	1,000
Mœara Enim Petroleum Mij. ..	116¾–117	116¼–116¾	100
,, ,, 1-1,000 Oblig. 5	102	102	250-1,0
"Moesi Ilir" Petroleum Mij. ..	35	36	—
Nederl.-Rumeensche Petroleum Mij.	16	16	
Nieuwe Ned. Petroleum Mij. And...	55¼	55¼	1,00000
Oliebronnen in Hannover Mij. ..	175	174	—
Panolan Maatschappij Cert. ..	340xd.	340 x.d.	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	138	138½	1,000
,, ,, (Common) ..	92¼	92	—
Sumatra-Palembang Petroleum Mij	60	61	500

ROUMANIAN PRODUCTION BY FIRMS IN 1905.

The output of the leading firms in the Roumanian oil fields during 1905, compared with that of 1904, was as under:—

	1905. Tons.	1904. Tons.
Steaua Romana—		
Bustenari	110,200	106,521
Campina	77,515	92,804
Buzeu	12,254	7,975
Bacau	4,597	4,890
Other Fields	246	230
	204,812	212,420
Bustenari Co.	94,668	66,249
International Co...	51,050	49,524
Telega Oil Co.	45,602	47,815
Campina-Moreni..	31,425	5,333
Hagienoff and Campeanu ..	28,126	25,521
Arnheemsche Petroleum Co. ..	20,706	10,146
Romano-American Co.	11,673	712
Moreni Co.	10,206	—
Aquila Franco-Romana Co. ..	6,081	—
Grigorescu and Vladescu ..	9,494	7,914
Seceleanu Bros.	11,714	9,194
A. Van de Werke	5,181	4,377
Stanescu and Guiglescu.. ..	9,746	5,266
Ruzicka, Elias and Taubes ..	7,586	1,195
Louis Pasquier (Mercedes) ..	4,393	228
Riske, Popescu and Ionescu ..	3,122	2,806
George Storoe, Tach Stroe and I. Pisau	2,682	712
Mislisorea-Bustenari Co. ..	2,956	—
Romano-Belgian Co.	1,232	—
T. I. Rucareanu	1,135	1,723
G. Stefanescu and Co.	2,146	1,370
Campina-Poina Co.	1,453	1,741
Ambrose Congreve	1,002	1,330
Hollandsch-Rumeensche Co. ..	5,101	2,724
Ion Grigorescu	4,084	4,478
Italo-Roumanian Co.	1,246	1,336
Nederlandsch-Rumeensche Co.	1,566	1,241

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PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Spies Petroleum Co., Ltd.—The output for the week ended February 18th was 126,840 poods, or 2,045 tons.

Baku Russian Petroleum Co., Ltd.—The production for the week ended February 17th was 290,000 poods, or 4,675 tons.

The European Petroleum Co., Ltd.—The production for the week ended February 18th, 1906, was 88,733 poods, or 1,431 tons.

REGULATIONS FOR THE USE OF WATER FLUSH DRILLING SYSTEMS IN ROUMANIA.

The Roumanian Government has promulgated the following regulations which are to govern the use of water-flush drilling systems in Roumania:—

1. Every petroleum producer who wishes to adopt a water-flush drilling method has to make in advance arrangements to enable him immediately to detect any considerable loss of water. When such loss has been detected, drilling has to be stopped at once, and can only be resumed after a continuance of this loss has been rendered impossible by casing in that part of the borehole. To check the quantity of water each well has to be provided at the start of drilling with an arrangement to measure the quantity of water entering the borehole, and the vessels into which the water is put on its return from the well are to be watertight.

2. In proven oil fields where permeable strata are known to exist at various depths the producer is bound to case in the borehole continuously as it is drilled. Only in special cases when passing through powerful layers of salt, impermeable clays, compact hard sandstone, etc., by permission of the district engineer and with the approval of the mining department, boring may be permitted with the well remaining uncased for a greater depth.

3. Drilling with water flush has to stop above the oil stratum. In special cases the district engineer may permit drilling with water flush right until the strike of oil.

4. In non-proven lands drilling by water flush is altogether prohibited; in special cases, where the geological and mining conditions are favourable, it may be permitted, but only in combination with a dry system. Such permission will be granted only after a favourable opinion has been expressed by the consultative commission which will be established at the Ministry of Domains.

5. In all boreholes, of whatever system, all water flows have to be hermetically shut off so that they may not reach the oil strata. The producer is bound immediately the water is shut off to communicate to the district mines office particulars of the depth at which the water has been met with, the depth at which this water has been shut, and the method used for shutting it off.

6. The column of casing with which the water has been shut off in a borehole cannot be withdrawn without the permission of the district mines office, which has to be notified ten days before commencing this operation. The district mines office may call together some of the neighbouring producers to consult and decide whether such withdrawal of casing can be done without damaging the petroliferous deposits, and on the manner in which the closing of the well is to be carried out without flooding the oil strata.

The neighbouring producers may also satisfy themselves that these requirements have been complied with, but they can only do that in the presence of the district engineer, and they must not enter the derrick of the borehole or examine the logs. The cost of such a visit is to be defrayed by the producer who has brought it about.

7. In flowing wells, where the water is not hermetically shut off or remains open for a certain time, it has to be extracted in a continuous manner or shut off with an impermeable material to prevent damage to the plot on which the well is situated and to adjoining lands. If the owner of a well after being notified by the district mines office does not comply with the above requirements, the necessary work will be carried out by the mines office and the cost levied on the owner.

8. All the above regulations apply both to producing and exploration enterprises.

9. The control over the carrying out of these regulations rests on the surveillance department of the Ministry of Domains.

10. In case of non-compliance with the above regulations boring is to be stopped, and the owner is liable to penalties prescribed by the Mining Law.

11. When the flooding of an oil deposit, either by the use of water-flush boring or by non-shutting off of underground waters, through non-observing the above regulation, the Minister of Domains will appoint a commission to consist of the district engineer and two producers of the neighbourhood to examine the matter and fix the responsibility.

A NEW ROUMANIAN COMPANY.

A company has been formed in Roumania to take over and work the petroleum properties of Messrs. Hagienof and Campeanu at Campina and Bustenari, and the Helios refinery at Cernavoda. The title of the company will be: The Société Anonyme Roumaine de Petrole Trajan. The capital is 5,000,000 francs, divided into 10,000 shares of 500 francs each. The vendors receive as the purchase price 2,376,000 francs in fully paid shares for the oil properties, and 1,624,000 francs in fully paid shares for the Helois refinery, or in all 4,000,000 francs worth of shares. The remaining 1,000,000 francs are subscribed by the following persons and in the following amounts:—Messrs. Marmarosch, Blank and Co., 400,000 francs; and I. N. Hagienof, M. Campeanu, C. Campeanu, S. Herzog, A. Blank and I. Stematiu, 100,000 francs each. Of the subscribed capital, 30 per cent., or 300,000 francs, have already been paid up.

The following gentlemen have been appointed the first directors of the company:—Maurice Blank, I. G. Cantacuzene, I. N. Hagienof, M. Campeanu and P. Weiss.

◆

The Aquila Franco-Romana Co., of Roumania, which is controlled by Messrs. Desmarais Frères, of Paris, propose to substantially enlarge their business in Roumania. The extension will take place not only in the petroleum export trade, but also in the development of the production.

RUSSIAN NOTES.

The Batoum Case Oil Works.—The manager of the Caspian and Black Sea Society at Batoum has officially denied the reports of the pending re-opening of the case factory of his company at that port.

The Neft Co. has transferred their stock of lubricating oils at Czaritzin to Nobel Bros , so that the trade in this class of products is now concentrated in the hands of two firms—Nobel Bros. and the Mazout Co.—who are working together.

Another Oil Field Strike.—A strike has broken out in the oil fields at Tchimion, in the Ferghana province of Russia in Central Asia. The Cossacks had to be called out; eight men were arrested; 200 were dismissed from work. Work in the oil fields has been suspended indefinitely.

Batoum Export Trade.—In view of the continued discharges of employés and workmen engaged by the month by the Batoum bulk oil exporting firms there can be no doubt now that many of these firms intend to suspend export operations altogether this year or reduce the same to minimum dimensions. This is due to the small production of crude oil at Baku and the restricted output of products for export abroad.

Liquid Fuel Regulations.—According to the present regulations governing the use of liquid fuel on steamers in Russia, the flash-point has to be of a minimum of 158° F. In order to help the Volga shipping industry in its present difficult position owing to the shortage of liquid fuel in the market, the Minister of Communications, by agreement with the Minister of Finances, has permitted the use of liquid fuel to a flash-point of 140° F.

The Czaritzin Market.—In the latter part of January the oil market at Czaritzin became much more active than before, and in the 10 days ended January 21st (o.s.) there were despatched to the interior as much as 436,245 poods of kerosene, 580,400 poods of residuals, and 72,965 poods of lubricating oils, etc. The difficulties of the trade arising from the shortage of tanks have been somewhat smoothed over; fresh difficulties are now encountered in the lack of locomotives on the South-Eastern Railways which serve the district.

◆

CRUDE OIL DESTRUCTION AT THE BAKU OIL FIELDS.

The quantities of crude oil belonging to various firms, destroyed by fire during the August disturbances at the Baku oil fields, were as under:—

	Poods.
Mantacheff & Co.	614,747
Aramazd Co.	264,856
Kavkaz Co.	210,117
Caspian Society	196,734
Mirzoeff Bros.	180,926
Baku Russian Petroleum Co., Ltd.	124,423
Schibaieff Co.	105,408
Baku Naphtha Co.	69,036
Caspian and Black Sea Society	20,676
Russian Petroleum and Liquid Fuel Co.	6,854
Pitoeff & Co.	89,483
Russian Naphtha Co.	82,137
57 other firms	1,028,619
Total	2,945.012

It will be observed that among the large firms who do not figure at all in the above list are; Nobel Bros., Moscow-Caucasian Co., Zoubaloff, Assadulaeff, Bibi-Eybat Petroleum Co., Ltd., Mussa Nagieff and European Petroleum Co., Ltd.

AMERICAN NOTES

A "Monarch" Well.—The well of the Monarch Oil Co., in the Coalinga field, has again asserted itself, and is now doing about 1,000 barrels of oil daily. The well is under perfect control, and the production is being cared for, two leased lines having brought this about.

Frost Causes Trouble.—We learn from the latest American journals to hand that oil field work in the Kansas and Indian Territory fields is being considerably hampered by a great fall of snow and by severe frosts. As a consequence of the latter, the movement of oil is carried on with some difficulty.

A New Pipe Line.—The Standard Oil Co. has now began the construction of an eight-inch auxiliary pipe line from the refinery at Lima to Chicago, connecting at Whiting with the Kansas-Indian Territory trunk line, and making possible the handling of oil underground from the Trans-Mississipi field through Ohio to the seaboard, touching the refineries at Lima, Cleveland, and throughout Pennsylvania.

The Prairie Co. Erect More Tanks.—A despatch from Independence, Kansas, records the fact that during the last seven days of January the Prairie Oil and Gas Co. completed no less than 11 storage tanks at the Copan Farm, which is a record for one week. Grading is now completed for the erection of 80 additional tanks at Copan, while 120 acres of land for storage purposes has just been acquired at Caney, Kansas.

An Important Oil Strike —An important oil advance has been made near Oblong, Ill., which is miles away from productive territory that has been hitherto developed. In the locality, the Minnetonka Oil Co. hold leases on about 22,000 acres. Gas was struck at 870 feet, and the oil producing formation was encountered at 900 feet. Operators from West Virginia and Pennsylvania are hurrying to the locality.

The Stewart Field.—A communication from Leamington states that the Stewart territory has a very promising outlook. The railroad company is increasing facilities to the field and making preparations for the loading of tank cars for shipment to the refineries of Sarnia and Petrolia. Oil men are pouring into the locality from West Virginia, Ohio, Indiana, and in fact many oil fields further distant. It is now very difficult to get territory on lease.

In Ritchie County.—The greatest attention is now being paid by operators to Ritchie county, for the recent discoveries in the Goose Creek have been such as to lead oil men to think that a considerable area of new producing territory may be developed. The oil is found in the salt sand, and the wells have an initial production up to 60 barrels per day. The South Penn Oil Co. has completed a producing well, which is located in advance of any previous test, and other tests are now being drilled in the locality.

A White Oil Producer.—Writing from Pittsburg, our own correspondent states that the recently brought in well in the William Mengert Farm, 12 miles south-east of Mansfield, O., is greatly discussed among oil men, inasmuch as the product is an almost white oil of very high gravity. A Pittsburg operator, who has been at the well for some days, has stated that, although he desired to obtain a few leases close to the new producer, all the available territory has been leased for more than five miles round the location, and fancy prices are now being demanded for lots outside that radius. The well is said to be now producing 70 barrels per day. There are two competing companies purchasing the oil—the Buckeye Pipe Line Co. and the Sun Oil Co., of Toledo, and the price paid is 25 cents higher than the present quotation for the crude of the Pennsylvania grade, which would make its market value at $1·83 per barrel.

The American Oil Market.

New York, Week ended Feb. 10th.

The very strong field situation, as shewn by the monthly report of operations, has again raised the hopes of the operators in the fields for an advance in the price of their products. A decrease in completions and in new production in the Northern fields was expected, but not to the extent shewn. While the operators, by reason of the decrease in new production and in development work, hope for improvement in the market value of their product, the report contains features which are discouraging to them and fully offset whatever prospects there may be for better prices. The average production of the January wells was the smallest of any of which we have record, and it is therefore not a cause for wonder that new development work is being restricted. The reports from the producing regions during the past week shew no improvement in results over the January average, says the *Oil, Paint and Drug Reporter*, and the outlook for the producers is regarded as discouraging. There has been a succession of dry holes, the percentage shewing an increase, while the average production of the completions has been very small, probably no better than the January average. A few good wells have been reported, but a well shewing a production of 100 barrels or over is now a rare occurrence. The large majority of the wells completed were small pumpers, ranging from 2 to 10 barrels per day, and the driller who could report a 15 or 20 barrel well was indeed fortunate. Considerable interest has been shewn in the new developments in Illinois, where it is thought a prolific field exists, but the ideas of the owners of land have become extravagant, and development operations are checked by their greed. In the mid-continent fields of Kansas, Oklahoma and Indian Territory daily production shews some falling off, and it is probable the operators will curtail field work until a better market is assured for their product, the stocks now increasing at the rate of over 30,000 barrels a day. The production in Texas and Louisiana is also decreasing, and now amounts to about 58,000 barrels a day. The price of Texas crude is quoted at 29 @ 33c. for Batson, as to gravity; Humble, 33c.; Saratoga, 30c.; Sour Lake, 39c.

Refined and Products.—The demand for refined for export has been active during the past week, a larger number of tank vessels having been on this side than for a long time. The situation abroad has shewn no important change, but stocks are said to have decreased and the demand for American oil has improved. Late advices from Baku state there has been considerable improvement in the situation and the production as increasing, the output during December being placed at upwards of 20,000,000 poods. The engagements during the past week exceeded 450,000 barrels, nearly all for shipment in bulk.

The price for barreled oil has remained steady at 7·60c. for New York loading, and at 7·55c. for Philadelphia loading. The principal foreign markets are easier. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. 3d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export have been in light request, and sales of about 50,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in good request, and sales of over 40,000 barrels are reported. Pennsylvania crude is quoted at 7·60c. in barrels.

Crude naphtha continues steady. For export, sales of about 6,000 barrels have been reported.

CLOSING QUOTATIONS.

	Crude.	Week ended	
		Feb. 3. 1906.	Feb. 10. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4·70	4·70
Residuum, bbls for export	.. ..	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were :—

	Week ended Feb. 10. 1905.	Feb. 10. 1906.
Tiona	1·54	1·68
Pennsylvania	1·39	1·58
North Lima	0·93	0·94
South Lima	0·88	0·89
Indiana	0·88	0·89
Canadian Oil :		
Petrolia	1·33	1·34

Refined—For Export.

		Week ended Feb. 3.	Feb. 10.
Cargo Lots for export	per gal.	7·60	7·60
In bulk		4·70	4·70
Philadelphia loading		7·55	7·55

Refined in Cases—110 Fire Test.

	Week ending Feb. 3.	Feb. 10.
5,000 to 10,000	10·35	10 35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended Feb. 3.	Feb. 10.
120 fire test, S.W.	per gal...	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ending Feb. 3.	Feb. 10.
Naphtha, crude, car. lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	17	17

Pennsylvania Oil Runs from Feb. 2nd to Feb. 7th were:—Feb. 2nd, 62,883; Feb. 3rd and 4th, 70,366; Feb. 5th, 31,142; Feb. 6th, 44,449; Feb. 7th, 53,451; For the month of December, 2,324,476.

The Deliveries of Pennsylvania Oil for the same dates were:—58,860; 90,571; 83,023; 66,141; 71,436; For the month of December, 2,450,174.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended Feb. 9 and from Jan. 1, were as follows :—

	Week.	Year.	1905.
Refined, barrels and bulk	467,700	1,302,800	958,700
Refined, cases	—	1,836,000	3,039,000
Crude, barrels and bulk	45,200	235,200	154,600
Crude, cases	—	25,000	30,000
Naphtha, barrels	6,500	57 600	76,600
Residuum, barrels	72,100	104,100	94,300
Lubricating, barrels	10,500	53,400	6,800
Total, barrels cde. eq.	795,190	2,992,832	2,858,427

Clearances for the Week.

During the week ended Feb. 9th, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows :—

	Week.	Year.	1905.
Refined	12,904,090	50,935,180	52,473,246
Crude	—	7,700	114,489
Naphtha	16,700	1,073,150	1,885,585
Residuum	—	—	1,844,915

Export Statistics.

The total exports from the port of New York and from the United States have been :—

	Gallons.
From New York, week ended Feb. 9th	17,205,453
Total from New York, from Jan. 1, 1906	67,924,606
Same period last year	70,078,817
Decrease	2,154,211
From United States, week ended Feb. 9th	31,872,766
Total from United States, since Jan. 1, 1906	128,280,361
Same period last year	112,448,634
Increase	15,831,727

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The "Review" Shipping List.

Feb. 22, 1906.

Specially Prepared for this Journal.

Note.—Except when otherwise stated the Vessels are Steamers.

(The following abbreviations are used in this table:—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Sables d'Olonne	Philadelphia	L. Jan. 22
ALCHYMIST	Southampton	—	P. Needles, Feb. 20
AMERICAN	New York	Antwerp	L. Feb. 8
APPALACHEE	SanFrancisco	Shanghai	L. Jan. 24
APSCHERON	Barcelona	Genoa	Arr. Feb. 18
ARAL	Philadelphia	Dover	P. Del. Break., Feb. 7
ARAS	Batoum	London	Off I. of W., Feb. 1
ARGYLL	Port Harford	Portland	L. Jan. 29
ASTRAKHAN	Tyne	Philadelphia	Arr. Feb. 14
AUGUST KORFF	Philadelphia	Nordenham	L. Feb. 10
AUREOLE	Fiume	Trieste	L. Feb. 17
AZOV	Coleta Buena	Callao	Arr. Nov. 16
BAKU STANDARD	Kustendje	Rouen	L. Algiers, Feb. 14
BALAKANI	Port Arthur (Texas)	Manchester	Arr. Feb. 19
BATOUM	Tyne	Port Arthur (Texas)	P. Dunnet Head, Feb. 17
BAYONNE	Venice	New York	Arr. Feb. 8
BEACON LIGHT	Lisbon	Penarth	Arr. Feb. 14
BEME	Bombay	Rangoon	L. Feb. 2
BLOOMFIELD	Tyne	New York	Arr. Feb. 10
BORJOM	Batoum	Alexandria	Arr. Feb. 6
BRILLIANT	New York	Hamburg	P. Prawle Pt., Feb. 19
BROADMAYNE	Manchester	Kustendje	P. Peniche, Feb. 10
BULLMOUTH	Palembang	—	L. Shanghai, Feb. 16
BULYSSES	Kustendje	Dover	L. Const'iple, Feb. 15
BURGERMEISTER PETERSEN	Philadelphia	Swinemunde	P. Del. Break., Feb. 5
CADAGUA	—	—	In port, Bilbao, Jan. 31
CALCUTTA (Br. bq.)	Newcastle (N.S.W)	SanFrancisco	Arr. Feb. 17
CARDIUM	Singapore	—	L. Jan. 23
CAUCASIAN	Philadelphia	London	Arr. Feb. 19
CHARLOIS	New York	Rotterdam	L. Feb. 8
CHESAPEAKE	Manchester	Philadelphia	Arr. Del. Break., Feb. 11
CHESTER	Antwerp	New York	Off I. of W., Feb. 16
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	—	Samboe	Arr. Feb. 19
COL. E. L. DRAKE	New York	Galveston	L. Oct. 25
COWRIE	Cardiff	Singapore	L. Suez, Feb. 11
CYMBELINE	Avonmouth	Penarth	Arr. Feb. 18
CZAR NICOLAI II.	Hamburg	Batoum	Off I. of W., Feb. 12
DAGHESTAN	St. Louis (Rhone)	Batoum	L. Feb. 16
DAKOTAH	Hong Kong	SanFrancisco	L. Yokohama, Jan. 30
DELAWARE	Belfast	Philadelphia	P. Tory Island, Feb. 18
DEUTSCHLAND	New York	Hamburg	L. Feb. 11
DIAMANT	Savona	New York	Arr. Feb. 19
ELAX	Singapore	—	L. Feb. 16
ELISE MARIE	New York	Swinemunde	P. Butt of Lewis, Feb. 19
ENERGIE	Tyne	New York	L. Feb. 9
ERIVAN	Swansea	Port Arthur (Texas)	Arr. Feb. 8
EUPLECTELA	Hamburg	Philadelphia	Off I. of. W., Feb. 20
EXCELSIOR	New York	Hamburg	P. Dover, Feb. 19
EZIO	—	—	Coasting Peru
FRANCE MARIE	Marcus Hool	Barcelona	Arr. Dec. 6
GEESTEMUNDE	Christiania	Tyne	Arr. Feb. 19
GENESSE	Manchester	Philadelphia	L. Liverpool, Feb. 17
GEORGIAN PRINCE	Tyne	New York	L. Jan. 30
GOLDMOUTH	Soesoe	Hamburg	Arr. Feb. 16
GRAF STROGANOF	Cronstadt	Odessa	In Tyne, Jan. 10
GUT HEIL	—	New York	Arr. Feb. 10
HAINAUT (Dch. shp.)	Smyrna	Antwerp	P. Gibraltar, Feb. 15
HARRY WADSWORTH	Port Arthur (Texas)	—	At Norfolk (Val.), Feb. 10
HELIOS	Trieste	Constanti'ple	At Fiume, Feb. 13
HOTHAM NEWTON	Middlesboro'	New York	Arr. Feb. 16
HOUSATONIC	Newcastle (N.S.W.)	SanFrancisco	L. Jan. 31
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Novorossisk	Naples	L. Consti'ple, Feb. 6
J. B. AUG. KESSLER	Port Arthur (Texas)	Dover	L. Feb. 5
JAMES BRAND	Tyne	Port Arthur (Texas)	L. Jan. 16
KURA	Penarth	Philadelphia	L. Feb. 8
LA CAMPINE	New York	Antwerp	L Feb. 8
LA FLANDRE	Ghent	Philadelphia	P. Lizard, Feb. 13
LA HESBAYE	New York	Antwerp	Arr. Feb. 19
LA MADALEINE	St. Louis (Rhone)	Antwerp	Arr. Feb. 9
LA VIGUESA	Marcus Hook	Vigo	Arr. Nov. 6
LACKAWANNA	London	Philadelphia	L. Feb. 14
LE COQ	Port de Bouc	Philadelphia	P. Gibraltar, Feb. 5
LOUTSCH	Barcelona	Novorossisk	L. Const'n'ple, Sept. 5
LUCERNA	Philadelphia	Flushing	P. Reedy Island, Feb. 9
LUCIFER	Newport	New York	Arr. Feb. 21
LUCIGEN	Philadelphia	Rotterdam	Arr. Feb. 19
LUCILINE	Philadelphia	Dunkirk	P. Del. Break., Feb. 9
LUMEN	Bergen	Tyne	Arr. Jan. 12
LUX	Rouen	Philadelphia	P. Tarifa, Feb. 17
MAKKAVEI	Batoum	Odessa	L. Feb. 6
MANHATTAN	New Orleans	Bremen	Arr. Feb. 16
MANNHEIM	New York	Rotterdam	P. Lizard, Feb. 20
MARGARETHA	London & Newport	Manzanilla	Off Barry Island, Feb. 1
MEXICAN PRINCE	Tyne	Cienfuegos	Arr. Feb. 4
MIRA	Philadelphia	Rouen	Arr. Feb. 15
MUREX	Samboe	—	L. Feb. 15
NARRAGANSETT	Tyne	New York	L. Feb. 21
NERITE	Singapore	Balek Pappan	Arr. Jan. 17
NEW YORK	Rotterdam	New York	P. Scilly, Feb. 17
OCEAN	Philadelphia	Flushing	P. Del. Break, Feb. 1
ORANJE PRINCE	Tyne	Cuba	P. Turk's Island, Feb. 18
ORIFLAMME	Rouen	Philadelphia	P. Lizard, Feb. 17
OSCEOLA	Tyne	NewportNws.	Arr. Feb. 15
OTTAWA	Marcus Hook	Vera Cruz	P. Del. Break., Feb. 14
OURAL	Port Arthur (Texas)	Rouen	L. Newport News, Feb. 8
PALEMBANG	Bangkok	Palembang	L. Jan. 10
PAULA	New York	Dantzig	L. Jan. 26
PECTAN	Port Arthur (Texas)	—	L. Feb. 3
PENNOIL	Philadelphia	Rotterdam	Arr. Jan. 20
PERLAK	Hong Kong	Palembang	L. Jan. 20
PETROLEUM	—	Gibraltar	Arr. Dec. 18
PHOEBUS	Hamburg	New York	Off I. of W. Feb. 20

Vessel.	From.	For.	Latest Date and Position.
PINNA	Philadelphia and London	Antwerp	Arr. Feb. 20
POTOMAC	Avonmouth	New York	P. Fastnet, Feb. 18
PROMETHEUS	Adelaide	London	L. Feb. 3
PRUDENTIA	Rouen	Port Talbot	Arr. Jan. 21
RION	Tyne	Port Arthur (Texas)	P. Prawle Pt., Feb. 10
ROCK LIGHT	Port Arthur (Texas)	Manchester	P. Cape Henry, Feb. 6
ROSSIJA	Hamburg	Novorossisk	P. Malta, Feb. 20
ROTTERDAM	Rotterdam	New York	L. Feb. 17
RUSSIAN PRINCE	New York	Havana	L. Feb. 3
SALAHADJI	Singapore	Sanga Sanga	L. Jan. 21
SEMINOLE	Philadelphia	Calcutta	Arr. about Feb. 7
SILVERLIP	Hamburg	Tyne	Arr. Feb. 2
SINGU	Bombay	Rangoon	L. Jan. 26
SNOWFLAKE	Philadelphia	Hull	L. Feb. 11
SOPHIE	Venice	Messina	L. Feb. 6
SPONDILUS	Cardiff	Singapore	Arr. Port Said, Feb. 14
STANDARD	Copenhagen	Bangkok	Arr. Port Said, Feb. 13
STROMBUS	Singapore	—	L. Jan. 14
SURAM	Newport	Batoum	L. Feb. 20
SUWANEE	Barrow	New York	L. Feb. 10
SVIET	Alexandria	Odessa	Arr. Feb 16
TELENA	Singapore	—	L. Feb. 13
TEREK	Manchester	Philadelphia	L. Liverpool, Feb. 5
TIFLIS	Tyne	Philadelphia	Arr. Feb. 14
TIOGA	Batoum	Liverpool	Arr. Nov. 25
TONAWANDA	New York	Kurrachee & Bombay	L. Feb. 13
TURBO	Port Arthur (Texas)	Newport	P. Cape Henry, Feb. 8
TUSCARORA	Calcutta	New York	Arr. Feb. 2
TWINGONE	Madras	Rangoon	L. Jan. 28
VEDRA	Algiers	Philadelphia	Arr. Feb. 14
VILLE DE DIEPPE	Philadelphia	Rouen	P Del. Break, Feb. 4
VILLE DE DOUAI	Calais	Dunkirk	Arr. about Feb. 1
VOLUTE	BalekPappan	Shanghai	Arr. Feb. 15
WEEHAWKEN	London	Sumatra	At Colombo, Feb. 2
WILLKOMMEN	New York	Swinemunde	L. Feb. 11
WINNEBAGO (Late KINSMAN)	Shanghai	Bombay	Arr. Jan. 26

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

February 23rd, 1906.

Russian and Roumanian Refined Petroleums are higher in price since our last report, importers' prices being as follows:—

Russian 5⅞d.; American, 6⅛d.; Water White, 7⅝d.; and Roumanian, 5⅞d.

LUBRICATING OILS

are unaltered, latest quotations being:—

American pale, £7 5s. to £8 15s.
American dark cylinder, from £7 10s.
American filtered cylinder, from £10 12s. 6d.

TURPENTINE.

American turpentine is quoted about the same as last week, namely, for Spot and to the end of May 48s. 3d., with slightly lower prices for deliveries later on in the year.

LIVERPOOL OIL MARKET.

February 22nd.

Refined oils are quiet, but sellers now quote 6½d. for Russian and 6⅝d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, February 22nd.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, February 22nd.

Standard White is quoted at 7·55.

RUSSIA.

Baku, February 20th.

The petroleum market is firm. Light crude is now quoted, spot, 26 copecs; heavy Balakhany crude, spot, 26 copecs; future, 27 copecs; residuals, 27 copecs.

BELGIUM.

Antwerp, February 17th.

The petroleum market is quiet. Price of Standard White, spot, 19½ francs per 100 kilos; February, 19½ francs; March, 19¾ francs; May, 20 francs.

GERMANY.

Hamburg, February 17th.

The kerosene market is weak. The price of American Standard White is 7·10 marks per 50 kilos.

ROUMANIA.

February 16th.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	3·35-3·40
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery	3·00- —
Paraffin	120·00-125·00
Lubricating Oils –	
Agricultural	20-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octro tax of 12 fcs. per 100 kilos.

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
„ sp. gr. 0·720-0·725	8·00- 9·00
„ sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

Bombay, February 3rd.

There has been no change in prices of Burma oils since our last report, but the tendency is firmer.

American, "Snowflake," 150 deg.	Rs. 6	0	2
„ Chester, 125 deg.	4	8	2
„ Monkey Brand, 125 deg.	4	2	2
Russian, "Anchor," 125 deg.	4	14	6
„ "White Camelia" brand, 125 deg.	4	0	2
„ "Rising Sun," bulk, in local made tins	3	14	0
„ "Elephant" brand, in local made tins	3	10	0
„ Bulk, in Bombay Bazaar, 125 deg. per 10 gallons	3	3	0
Borneo oil in bulk	2	14	6
Burma Oil, in bulk, per 8 imperial gallons	2	11	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

FOR THE WEEK ENDED FEBRUARY 20th, 1906.

Specially prepared for this Journal by . . . the Custom House.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Feb. 14	London	Schliemann's Oil Co.	East Point	60 brls.	Lub.	2,400	Philadelphia
,, 14	,,	A. Brown and Co.	Mackinaw	180 brls.	,,	7,200	,,
,, 14	,,	G. W. Sheldon and Co.	Europe	8 brls.	,,	400	New York
,, 15	,,	G. Woodcock	Volturno	68 brls.	,,	2,720	Fiume
,, 15	,,	General Petroleum Co.	Pinna	Bulk	Lamp	221,200	Philadeldhia
,, 16	,,	Vacuum Oil Co.	Europe	906 brls. 60 ½-brls.	Lub.	37,440	New York
,, 16	,,	Mordaunt Bros.	Mackinaw	780 brls.	,,	31,200	Philadelphia
,, 16	,,	Worthington and Böler	,,	100 brls.	,,	4,000	,,
,, 16	,,	Consolidated Petroleum Co.	Caucasian	Bulk	Gas	1,526,430	,,
,, 16	,,	B. Jacobs and Sons	Montezuma	200 brls.	Lub.	8,000	Halifax
,, 17	,,	London Oil Storage Co.	Cressida	54 brls.	,,	2,270	Hamburg
,, 17	,,	Mercantile Lighterage Co.	Europe	20 brls.	,,	800	New York
,, 17	,,	H. B. Case	Artois	10 brls.	,,	500	Rouen
,, 19	,,	G. W. Sheldon and Co.	Ptarmigan	7 brls.	,,	290	Antwerp
,, 19	,,	,,	Minneapolis	42 pks.	,,	1,750	New York
,, 19	,,	Mordaunt Bros.	,,	210 brls.	,,	8,500	,,
,, 19	,,	Scott's Wharf	,,	50 brls.	,,	2,000	,,
,, 19	,,	Vacuum Oil Co.	,,	219 brls.	,,	8,760	,,
,, 19	,,	G. and H. Green	Europe	85 brls.	,,	3,330	,,
,, 19	,,	C. Price	Mackinaw	100 brls.	,,	4,000	Philadelphia
,, 20	,,	Mordaunt Bros.	,,	220 brls.	,,	8,900	,,
,, 20	,,	Anglo-American Oil Co	Minneapolis	1039 brls.	,,	41,560	New York
,, 20	,,	London Oil Storage Co.	Cressida	36 drums	,,	150	Hamburg
,, 14	Liverpool	Burnaby and Chantrell	Rhineland	6 brls.	Lub. Gr.	280	,,
,, 14	,,	Huxley and Co.	,,	13 brls.	Lub.	520	,,
,, 14	,,	Liverpool Storage Co.	Cevic	180 brls.	,,	7,200	New York
,, 14	,,	,,	Slavonia	325 brls. 19 ½-brls.	,,	13,380	,,
,, 14	,,	G. B. Taylor	Pannonia	675 brls.	,,	27,000	,,
,, 15	,,	W. B. Dick and Co.	Merion	305 brls.	,,	12,200	Philadelphia
,, 16	,,	Crew, Levick Co.	,,	868 brls.	,,	36,460	,,
,, 16	,,	Pure Oil Co.	,,	265 brls.	,,	10,630	,,
,, 16	,,	Midland Railway Co.	,,	25 brls.	,,	1,050	,,
,, 16	,,	A. Hopps and Sons	,,	375 brls.	,,	15,000	,,
,, 16	,,	Worthington and Boler	,,	50 brls.	,,	2,000	,,
,, 16	,,	G. B. Taylor	,,	1650 pks.	,,	66,000	,,
,, 16	,,	Meade-King, Robinson and Co.	,,	1380 brls.	,,	51,200	,,
,, 16	,,	,,	Vedamore	121 brls.	,,	4,840	Baltimore
,, 16	,,	A. Hopps & Sons	,,	120 brls.	M.Colza	5,160	,,
,, 17	,,	Rogers and Bright	Canada	10 brls.	Lub.	400	New York
,, 17	,,	Vacuum Oil Co.	,,	300 brls. 25 ½-brls.	,,	12,500	,,
,, 19	,,	G. B. Taylor	,,	1289 brls.	,,	51,560	,,

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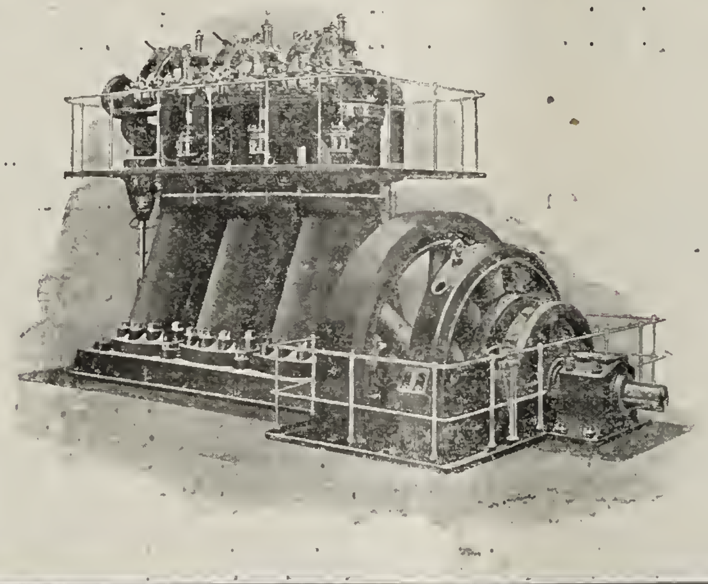

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Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Feb. 19	Liverpool	Liverpool Storage Co.	Canada	60 brls.	Lub.	2,400	New York
,, 19	,,	J. W. Jones	,,	12 brls.	,,	360	,,
,, 19	,,	W. B. Dick and Co.	,,	425 brls.	,,	18,050	,,
,, 19	,,	Valvoline Oil Co.	Carmania	20 brls.	,,	820	,,
,, 20	,,	Burnaby and Chantrell	,,	50 brls.	,,	1,960	,,
,, 20	,,	Liverpool Storage Co.	,,	418 brls.	,,	16,720	,,
,, 20	,,	,,	Anna Tiede	5 brls.	,,	200	Hamburg
,, 20	,,	Pickford's Ltd.	,, ,,	35 casks	,,	1,130	,,
,, 15	Bristol	,,	City of Malaga	210 pks.	,,	1,500	,,
,, 15	,,	Anglo-American Oil Co.	Potomac	Bulk	Lamp	738,890	Philadelphia
,, 15	Cardiff	United Oil Co.	Tibor	300 brls.	Lub.	12,000	Trieste
,, 17	,,	Guthrie, Heywood and Co.	Lord Iveagh	60 brls.	,,	2,400	Baltimore
,, 17	,,	,,	,,	60 brls.	Min. Colz.	2,400	,,
,, 16	Grimsby	J. Sutcliffe and Sons	Wrexham	10 casks	Lub.	300	Antwerp
,, 15	Hull	T. Wilson, Sons and Co.	Sultan	36 brls.	,,	1,440	,,
,, 15	,,	,,	Idaho	120 bls.	,,	4,800	New York
,, 17	,,	,,	Cito	44 pks.	,,	1,200	Hamburg
,, 17	,,	Helmsing and Son	Erika	16 brls.	,,	640	Riga
,, 15	Manchester	G. B. Taylor	Calderon	3688 brls.	,,	147,520	New York
,, 15	,,	Livrepool Storage Co.	,,	807 brls.	,,	33,340	,,
,, 15	,,	Anglo-American Oil Co.	Genesee	Bulk	,,	427,000	Philadelphia
,, 15	,,	Worthington and Boler	Man. Commerce	30 brls.	,,	1,200	,,
,, 17	,,	Manchester Liners	,, ,,	235 brls.	,,	9,500	,,
,, 19	,,	Wingate and Johnston	,, ,,	50 brls.	,,	2,140	,,
,, 19	,,	Worthington and Boler	,, ,,	319 brls.	,,	12,760	,,
,, 19	,,	Meade-King, Robinson and Co.	,, ,,	700 brls.	,,	28,000	,,
,, 19	,,	,,	,, ,,	60 brls.	Min. Colz.	2,400	,,
,, 15	Newcastle	Tyne-Tees Steam Shipping Co.	New Oporto	5 pks.	Lub.	160	Hamburg
,, 19	,,	,,	John Ormston	45 brls.	,,	1,800	,,
,, 19	,,	,,	Juno	82 brls.	,,	3,280	Antwerp
,, 15	Southampton	American Line	New York	445 brls.	,,	13,350	New York
,, 15	Dundee	D. Alexander	Sardinia	6 brls.	Lamp	240	Hamburg
,, 14	Glasgow	Anchor Line	Astoria	1445 brls.	M. Lub.	57,800	New York
,, 19	,,	,,	Columbia	1995 brls.	,,	79,800	,,
,, 19	,,	,,	,,	200 brls.	Min. Colz.	8,000	,,
,, 19	,,	J. and A. Allan	Carthaginian	300 brls.	,,	15,440	Philadelphia
,, 19	,,	,,	,,	1429 brls.	Lub.	64,310	,,
,, 15	Grangemouth	J. Currie and Co.	Staffa	4 brls.	,,	160	Hamburg
,, 15	,,	,,	Scalpa	25 brls.	,,	1,000	,,
,, 15	,,	W. G. Yooll and Co.	,,	100 brls.	Lamp	4,000	,,
,, 14	Leith	,,	Sardinia	50 brls.	,,	2,180	,,
,, 14	,,	G. Gibson and Co.	Eildon	5 brls.	Lub.	210	Antwerp
,, 15	,,	Graham-Yooll and Co.	Breslau	100 brls.	Lamp	4,360	Hamburg
,, 15	,,	J. Currie and Co.	,,	80 pks.	Lub.	1,890	,,
,, 14	Belfast	Anglo-American Oil Co.	Delaware	Bulk	Lamp	1,280,120	New York
,, 15	Cork	Palgrave, Murphy and Co.	City of Cadiz	5 pks.	Lub	170	Hamburg
,, 17	Dublin	,,	Lord Londonderry	60 brls.	,,	2,400	Baltimore
					Net Total	5,252,920	
Jan. 1	Belfast	Anglo-American Oil Co.	Excelsior	Bulk	Gas	50,000	Philadelphia

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO FEBRUARY 20th, 1906.

IN GALLONS.

[All Rights Reserved.]

Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.
Austria	—	868,230	14,720	157,180	—	11,000	—	—	—	—	—	—	—	—	14,720	1,047,410
Belgium	—	240	5,520	83,550	—	11,000	—	—	—	1,620	—	—	—	696	5,520	86,106
Borneo	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	8,000	8,000	—	20,000	—	—	—	—	—	—	—	—	8,000	28,000
Germany	10,780	693,440	12,430	314,520	—	—	—	—	—	2,320	—	—	—	4,980	23,210	1,025,260
Holland	—	—	—	160	—	—	—	—	—	773,600	—	98,200	—	7,080	—	879,040
Roumania	—	1,360,000	—	—	—	—	—	—	—	—	—	—	—	—	—	1,360,000
Russia	—	6,197,920	640	3,640	—	—	—	—	—	—	—	—	—	5,410	640	6,206,970
Sumatra, &c	—	—	—	—	—	—	—	—	—	930,000	—	—	—	—	—	930,000
U.S.A.	2,240,210	10,586,477	1,400,290	7,338,434	—	523,328	1,526,430	9,216,340	—	1,069,180	—	—	33,400	218,890	5,200,330	28,942,559
Other Countries	—	—	—	4,030	—	—	—	—	—	480	—	—	500	90,800	500	95,310
	2,250,990	19,706,307	1,441,600	7,909,514	—	565,238	1,526,430	9,216,340	—	2,777,200	—	98,200	33,900	327,856	5,252,920	40,600,655

MOVEMENTS OF PETROLEUM IN HOLLAND IN JANUARY.

	Amsterdam. Barrels.	Rotterdam. Barrels.
Stocks on January 1st	33,330	29,757
Transports in January	63,211	160,171
Deliveries in January	87,877	149,344
Stocks on January 31st	8,664	40,584

The borings which were carried for petroleum, near Germany, have been abandoned as hopeless at a depth of 1,000 metres.

The resignation of M. Timiriazeff, the Minister of Trade and Commerce in Russia will be received on all hands with great regret. The Russian petroleum industry has no more ardent supporter than M. Timiriazeff, who for a number of years has taken considerable interest in it.

The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XIV. *(New Series.)* March 3rd, 1906. No. 365.

Editorial Notes.

Latest Information from Baku.

The figures of the production of crude oil at the Baku oil fields in December, shewing a total output for the month of 34,300,000 poods, prove that the work of restoring the industry to its normal condition is meeting with a large measure of success. Some of the larger firms, such as Nobel, Mantascheff, Baku Naphtha Co., and the Moscow-Caucasian Co., have already returned to their normal rate of production, and there is now every hope that in a few months the total output at Baku will have reached its usual level. The high prices which the products are now realising act as an incentive to the producers to force the baling of the wells to their utmost capacity, in order to utilise the favourable moment. The Oil Exchange is fairly animated. Sellers are firm and and prices of all products have advanced. There is scarcely any oil available for sale, and prices therefore have a tendency to advance further. The prospects of the kerosene export trade are still undefined, but even this branch of the trade is expected to take a favourable course.

America's Petroleum Exports for January.

The statistics of the petroleum exports from America during the first month of this year, though again reaching almost record figures, were slightly behind those for December in amount, but not in value. The average monthly exports of American petroleum for the past year came to 97,000,000 gallons, but those for January topped the 100,000,000 gallon mark, and, as will be seen from the table upon another page, were valued at nearly $7,000,000. In round figures, they were an advance of 20,000,000 gallons upon the figures for the corresponding month a year ago. January's exports were distributed as follows: – Crude, 8,900,424 gallons; naphthas, 5,163,970 gallons; lubricating oil and paraffin, 17,258,613 gallons; illuminating oil, 64,715,414 gallons; and residuum, 4,615,347 gallons. The total shipments from New York amounted to 46,000,000 gallons; Philadelphia, 43,000,000 gallons; Boston, 24,000 gallons: Baltimore, 410,000 gallons; Delaware, 7,790,000 gallons; and Galveston, 2,600,000 gallons. In the shipments of crude oil there was during the month an increase of 2,200,000 gallons, as compared with the figures for the same period of 1905. The increase in the export of naphthas was 4,000,000 gallons, 5,000,000 gallons in illuminating oil, and 10,000,000 gallons in lubricating oil, the only decrease being that of 1,000,000 gallons in the exportation of residuum.

Batoum and its Trade in 1905.

It has seldom been our privilege to publish a more comprehensive account of the trade of an oil port than the one which appears upon other pages of this issue dealing with the trade of Batoum during the year 1905. We have had occasion to refer more than once lately to the serious falling off in the shipments from Batoum, but when viewed in the light of statistics, we have to admit that the condition of things is even worse than we depicted. The revolutionary crisis in the Caucasus has much to account for; the closing of the Batoum case oil works has brought disaster upon the port, and the increase in the freight for carrying kerosene from Baku to Batoum has likewise assisted to bring the petroleum export trade of Russia almost to a standstill. An old saying has it that "It never rains but that it pours," and most certainly disasters have not come single-handed to the Batoum export trade. The kerosene shipments from Batoum have declined one-third during the year, while the export of kerosene in cases shrunk to less than one-quarter the usual volume. The effect of this great decrease upon the other branches of commerce has naturally been very marked and a long time must necessarily elapse ere business again assumes its normal character. Consequent upon the closing of the case oil works, some thousands of workers were thrown out of employment, while those engaged in the various cooperages were, in many cases, in little better positions, for owing to the shortage of lubricating oils, the demand for barrels fell off considerably. In other commercial circles the same stagnation has been caused, and altogether it may be said that the petroleum export trade of Batoum during 1905 was not only in itself very bad, but created a situation in the general trade of the port which is almost without parallel.

The Growth of the Texas Oil Industry.

The remarkable growth of the petroleum industry of Texas-Louisiana, which stands out in bold relief to the stagnation which has for so long reigned in the Caucasus, has now reached such a point that these regions are producing quite as much oil as are the Baku fields. We well remember a few years ago, the remarkable opinions formed by the gentlemen who, on behalf of the Baku producers, visited the Texas fields, and at the time we pointed out the absurdity of the conclusions. Events have proved how correct our prediction was, and how erroneous were their conclusions. In spite of the latter, the Texas fields are still one of the world's greatest producing regions, and everything points to the period of prosperity which they are now enjoying continuing for a long time to come.

Petroleum Trade of Smyrna during 1905.

The Russian Consul at Smyrna, in a report to his Government, supplies some interesting particulars regarding the petroleum trade there for the past year. At the beginning of the year there was a stock of kerosene of 112,200 tins and 43,500 cases (of two tins each) at Smyrna. During the year, 702,000 tins and 276,000 cases were imported, against 755,000 tins and 294,000 cases in 1904. The total quantity of kerosene available on the market in 1905, therefore, was :—814,200 tins and 319,500 cases, against 765,000 tins and 296,000 cases in 1904. The deliveries of kerosene for the year amounted to 601,538 tins and 219,400 cases, against 652,800 tins and 252,500 cases in 1904. On January 1st, 1906, there was left a stock of 212,662 tins and 100,100 cases. At the beginning of 1905, the price of kerosene at Smyrna was five francs per case of two tins, and 4·50 francs per pair of tins. In April, the price began to decline, and in June reached 4 francs per case. In July, the price began to advance again, and in September reached 6·50 francs per case. After that, the price fluctuated between 5·50 francs and 6 francs, and in December stopped at 5·75 francs per case. The rise in price in kerosene, which was due to strikes on the Caucasus, has brought about the importation of American, Roumanian, and Hungarian oil, which in 1905 represented 5 per cent. of the total imports, and now has gone up as high as 30 per cent.

BATOUM PETROLEUM SHIPMENTS.

The shipments of petroleum products from Batoum during the week ended February 11th (o.s.) were as under (in poods) :—

	Illuminating oil.		Other products.	
	1905.	1906.	1905.	1906.
To Europe ..	221,000	—	142,000	—
To the East ..	137	2,000	—	—
To Russian Ports	99	—	—	—
From Jan. 1st to Feb. 11th :—				
To Europe ..	2,469,000	955,000	718,000	257,000
To the East ..	2,133,000	618,000	1,000	—
To Russian Ports	528,000	513,000	—	13,000

THE IMPORTATION OF PETROLEUM IN SIERRA LEONE.

A copy of the "Petroleum Ordinance, 1906" (No. 1 of 1906), has been received by the Board of Trade which was assented to by the Governor of Sierra Leone on January 10th, 1906, and which provides for the consolidation and amendment of the Laws relating to the importation, storage and sale of petroleum in Sierra Leone. No petroleum which gives off an inflammable vapour at a temperature of below 95° F. shall be allowed to be imported into the colony. The present Ordinance, which repeals Ordinances Nos. 32 of 1898 and 15 of 1899 and all rules and regulations made thereunder, is to come into force on such a day as the Governor may appoint by proclamation.

PETROLEUM IMPORTS INTO GERMANY IN JANUARY.

The following were the quantities of petroleum products imported into Germany in January :—

	Imports. Tons.	Exports. Tons.
Refined Illuminating Oil	174,376	86
Petroleum Distillates, including Crude Benzine, etc...	824	432
Lubricating Oils	12,598	199
Mineral Oils, for purposes other than illumination, lubrication, or gas manufacture ..	313	—
Mineral Oils for refining purposes	7,901	—
Total	196,012	717

The imports from the different producing countries were as under (in tons) :—

	Illuminating Oil.	Other Products.
United States	126,248	7,507
Russia	36,529	4,907
Austria-Hungary	11,085	884
Roumania	148	1,716
Dutch India	—	5,909

BAKU PRODUCTION IN JANUARY.

The total production of crude oil at the Baku oil fields in January has amounted to 34,308,000 poods, of which 4,798,000 poods were contributed by spouters. The production of the leading firms was as under :—

	Poods.
Nobel Bros.	6,300,000
Caspian and Black Sea Society	2,700,000
Mantacheff & Co.	2,600,000
Baku Naphtha Co.	2,300,000
Moscow-Caucasian Co.	1,700,000
Baku Russian Petroleum Co., Ltd. ..	1,200,000
Caspian Society	1,200,000
M. Nagieff	1,100,000
Zoubaloff	1,100,000
Assadulaeff	900,000
Pitoeff and Co.	900,000
Bibi-Eybat Petroleum Co., Ltd.	800,000
Russian Petroleum and Liq. Fuel Co., Ltd.	800,000
Russian Naphtha Co.	600,000
Naftalan Co.	500,000
European Petrolum Co., Ltd.	400,000

THE OPERATIONS OF THE BAKU REFINERES.

STATISTICS FOR JUNE AND JULY, 1905 (in poods).

I.—Manufacture of Illuminating Oils.

Distillation.

	Submitted to Distillation.			Products Received.				
	Crude.	Other Products.	Total.	Kerosene.	Residuals.	Other Products.	Loss.	Fuel used.
June, 1905.. ..	31,637,871	571,069	32,208,940	6,736,744	23,089,387	1,518,635	864,174	1,046,662
July, 1905	35,488,981	300,229	35,879,209	6,543,281	26,799,502	1,592,800	943,626	1,278,288

Refining.

	Submitted to Refining.			Refined Products Obtained.			Chemicals used.	
	Kerosene.	Other Distillates.	Total.	Kerosene.	Other Products.	Loss in Refining.	Acid.	Soda.
June, 1905.. ..	6,668,462	15,978	6,684,440	6,505,782	13 726	164,932	30,406	11,937
July, 1905	5,470,363	8,899	5,479,262	5,313,287	7,061	158,914	25,047	9,423

II.—Manufacture of Lubricating Oils.

Distillates Received.

	Machine Oil.	Spindle Oil.	Cylinder Oil.	Goudron.	Solar Distillates.	Residuals.	Other Distillates.	Loss in Distilling.	Fuel used.
June, 1905.. ..	1,198,346	163,408	54,190	718,005	1,238,703	1,252,864	6,410	261,478	609,496
July, 1905	1,843,371	106,148	59,000	797,778	1,518,217	1,064,827	7,480	325,080	628,096

Refined Products Received.

	Spindle Oil.	Machine Oil.	Cylinder Oil.	Loss in Refining.	Chemicals used.	
					Acid.	Soda.
June, 1905	157,156	1,006,739	38,552	138,318	51,393	5 598
July, 1905	108,533	1,089,106	42,671	127,097	48,123	6,[illegible]

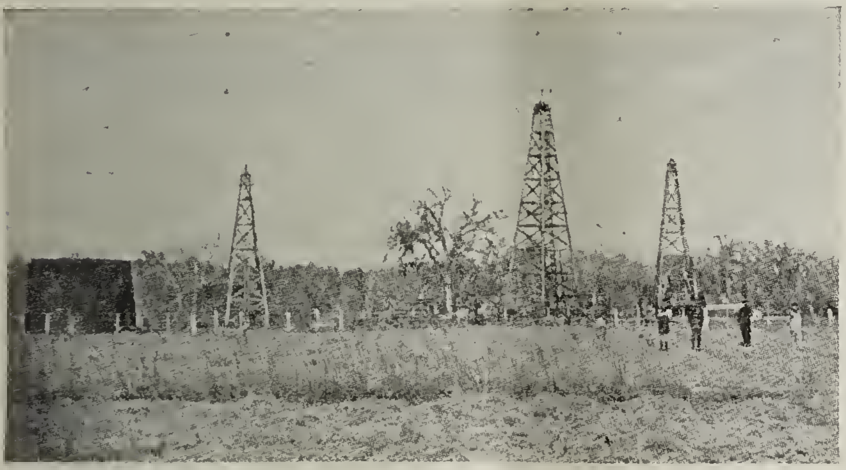
The Texas-Louisiana Gulf . . . . . Coast Oil Industry

Operations of the . . . Evangeline Oil Company.

The remarkable growth which has been the chief characteristic of the Texas-Louisiana Gulf Coast oil industry during the past few years stands out in prominence against the predictions of those experts who foresaw an early decadence of the south-eastern American petroleum industry.

The Evangeline Refinery on the Neches River.

Five years ago, with the Spindle Top boom still fresh in the minds of all interested in oil production, the total yield of that field was 3 593,113 barrels, which were valued at $630,572, while the following year, when the territory was joined by Jennings, La., the production rose to 18,000,000 barrels, of a value of $3,753,270. During the following year, the bringing in of a number of wells in the Sour Lake district, together with other new successful developments at Jennings, added a new production of 400,000 barrels to the total of the previous year; and in 1904, the discovery of Batson Prairie, of Saratoga and Matagorda resulted in a remarkable increase in the output of these Texas-Louisiana districts, for the production reached 28,247,638 barrels, which, on account of good market prices, realised $9,316,180.



In the Louisiana Oil Field: Anse la Butte.

But, as we have already pointed out in the Review, a new record was established last year, when as a result of the enormous outflow from the Humble wells, and the bringing in of new producers at Jennings, together with a number of minor developments, the production for the year reached 40,026,278 barrels, of a value of $15,995,711.

If we make a comparison with the output of the Baku wells during the past year, we shall find that the production of Texas-Louisiana regions alone more than equals the whole of the output of the Caucasus—a fact which is certainly full of significance.

Over one-quarter of the production from the Texas-Louisiana fields comes from the Jennings district, which last year was accredited with over 10,000,000 barrels. One of the most active operating companies in the Jennings field, and one which has greatly assisted the territory to rank as an important producer, is the Evangeline Oil Co., a concern with an authorised capital of a quarter of a million. The company has only been organised a few months, yet it has made progress that would open the eyes of some of those responsible for the management of many oil companies in which English capital is interested.

Receiving Oil at the Plaquemine Delivery Station.

The Evangeline Co. is not only a producer and transporter, but a refiner of oil, and is, in fact, the only concern owning pipe line facilities for the delivery of crude oil to the Mississippi River. Its pipe lines, along which are erected seven pumping stations, extend for 58 miles, and run from the field to the Atchafalaya River, from whence the oil is delivered to barges and transported to Plaquemine, on the Mississippi River. At the field, and also the refinery, considerable accommodation for the oil has been erected, and apart from the steel storage of 300,000 barrels, earthen reservoirs are now able to take care of almost 2,000,000 barrels.

The Evangeline Co.'s Pipe Line carried through Swamps.

The company's refinery is situated at Port Neches, a most favourable location on the Neches river, a navigable stream only a few miles south of Beaumont.

The refinery occupies nearly 52 acres, and has a capacity for 2,000 barrels per day. Docks are situated close by for loading barges, while the refinery is also connected with the main line of the Kansas City Southern railroad. The refinery contains ten crude stills, sixteen convertors, together with warehouses, cooperage, workmen's dwellings, electric light, installation, etc., and thus can be said to be of a most up-to-date character.

From the refinery, two pipe lines extend to Port Arthur and deep water, which, though owned outright by the Evangeline Co., are operated under lease by the Texas Co. In piping oil direct to the Mississippi River, the company has a great advantage in the lower Mississippi fuel oil market, in which over 2,000,000 barrels of oil are consumed annually. The line is now pumping about 6,000 barrels per day.

The importance of a situation near the Mississippi River cannot be over-estimated. As we have stated, there is the fuel oil demands of the lower part of the river, which are well worthy of consideration, but of far greater importance are the claims of the interior markets for the refined product, and what the Volga now is to Russia, so will the Mississippi be one day to America. Upon its waters oil can be shipped to the interior of America at far cheaper rates than those demanded by railway companies, and, inasmuch as the cost is in favour of river transport, the Mississippi will serve as a great feeder to inland markets.

Although in regard to wells, the Evangeline Co. has few, for they only number four, they are sufficient to yield an average monthly output of 100,000 barrels, but the developments now under way give promise that in the early future this output will be greatly exceeded.

◆

ROUMANIAN PETROLEUM EXPORT TRADE IN JANUARY.

According to preliminary figures published by the *Moniteur du Petrole Roumain*, the exports of petroleum products from Roumania in January have amounted to 13,843 tons. The exports of different products were :—

	Tons.
Crude Oil, Residuals, etc...	1,387
Illuminating Oil	7,964
Benzine	4,492
Total	13,843

The exports were distributed among the different countries as under :—

	Tons.
Germany	7,469
England	4,079
Austria-Hungary	1,529
Turkey	704
Other Countries	62
Total	13,843

◆

DELIVERIES FROM BAKU DURING THE FIRST TEN MONTHS OF 1905.

The deliveries of petroleum products from Baku during the first ten months of 1905, compared with the corresponding period of 1904, were as under :—

	1905. Poods.	1904. Poods.
Illuminating Oils	71,500,000	136,600,000
Lubricating Oils	10,500,000	13,900,000
Residuals	262,100,000	295,600,000
Crude Oil	23,600,000	18,400,000
Other Products	1,200,000	1,200,000
Total	368,900,000	465,700,000

AMERICAN PETROLEUM EXPORTS.

STATISTICS FOR JANUARY.

According to the official publication of the Washington Bureau of Statistics, the exports of petroleum from America from the various ports during January were as under:—

	1905. Quantities. Gallons.		1906. Quantities. Gallons.
CRUDE—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	3,623,145		7,790,133
New York	100,000		—
Philadelphia	1,077,147		415,717
Galveston	1,996,889		694,574
Total	6,797,181	Total	8,900,424
Total value for the month,	1905		$388,851
,, ,, ,,	1906		$518,771
NAPHTHAS—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	—		—
New York	810,879		1,087,386
Philadelphia	349,105		1,076,584
Galveston	—		—
Total	1,249,984	Total	2,163,970
Total value for the month,	1905		$125,027
,, ,, ,,	1905		$363,667
ILLUMINATING—			
Baltimore	—		3,000
Boston and Charlestown	4,803		4,499
Delaware	—		—
New York	42,644,163		35,072,678
Philadelphia	17,256,119		28,557,430
Galveston	52		1,077,807
Total	59,905,137	Total	64,715,414
Total value for the month,	1905		$3,936,306
,, ,, ,,	1906		$4,018,620
LUBRICATING AND PARAFFIN—			
Baltimore	237,500		407,207
Boston and Charlestown	10,909		20,268
Delaware	—		—
New York	5,821,289		10,609,178
Philadelphia	1,243,796		6,221,960
Galveston	—		—
Total	7,313,494	Total	17,258,613
Total value for the month,	1905		$965,046
,, ,, ,,	1906		$1,876,064
RESIDUUM—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	—		—
New York	1,987,440		—
Philadelphia	3,101,700		3,731,344
Galveston	828,786		884,003
Total	5,917,926	Total	4,615,347
Total value for the month,	1905		$184,618
,, ,, ,,	1906		$129,899
TOTAL MINERAL OILS—			
Baltimore	237,500		410,207
Boston and Charlestown	15,712		24,767
Delaware	3,623,145		7,790,133
New York	51,363,771		46,769,242
Philadelphia	23,117,867		43,003,035
Galveston	2,825,727		2,656,384
Total	81,183,722	Total	100,653,768
Total value for the month,	1905		$5,599,848
,, ,, ,,	1906		$6,607,021

◆

Oil Imports to Yokohama.—There were imported into Yokohama during the month of January 1,129,642 gallons of kerosene, to a total value of 215,360 yen, as against petroleum to the value of 80,000 yen for the corresponding month of 1905. The total value of the imported kerosene for the twelve months is set down in the monthly report of the Yokohama Chamber of Commerce at 3,384,783 gallons.

THE PETROLEUM EXPORT TRADE OF BATOUM.

STATISTICS FOR 1905.

At the beginning of last year, from the operations on the Batoum market it could be foreseen that there would be a substantial shrinkage in the export of illuminating oil. There was not the usual animation in sales, and the Anglo-American Oil Co., Ltd., who had previously been the principal buyers of kerosene at Batoum, ceased to buy cargoes. In 1904 this company had purchased more than 15,000,000 poods, which they exported to the English market. The other large buyer of Russian kerosene, the Consolidated Petroleum Co., Ltd., have in the first half of the year carried on their operations at about their normal rate; in the latter half, however, their export operations were naturally affected by the small arrivals of oils from Baku and local troubles at Batoum. The Consolidated Petroleum Co. takes its oil chiefly from its parent firms, Nobel and Rothschild. The third important importer of Russian oil also on the English market—the Homelight Oil Co., Ltd., which takes its oil from Mantascheff and the Caspian Society—has also suffered in its operations from the same causes.

To the purely accidental causes which have contributed to the fall in the Russian petroleum exports, must be added the raising of the rate for carrying kerosene from Baku to Batoum to 19 copecs per pood, which proved too onerous for the export trade. The result was that the total petroleum exports from Batoum in 1905 declined by one-third against the normal quantity, whilst, in the kerosene export separately, the decline amounted to 70 per cent. No doubt the closing of the case factories has played an important factor in reducing exports. Under normal conditions the annual export of kerosene in cases used to be from 20,000,000 to 22,000,000 poods. In 1905 the quantity of case oil exported amounted to only 5,400,000 poods, thus shewing a shrinkage in this class of product alone by 16,000,000 to 17,000,000 poods. Even after deducting this quantity from the total deficiency for the year, we still find a decline of 50–55 per cent. falling on the bulk oil shipments. The decline in bulk oil shipments became more accentuated in the second half of the year.

The shortage in the supply of lubricating oils, which began to be felt after the close the first half-year, has undermined the business of the cooperage works, which had previously just managed to exist. The output of barrels fell remarkably low, barely reaching 50,000, whilst in the previous year there were turned out more than 90,000 barrels, and in 1903, 105,000 barrels. We are thus here clearly faced by a steady and systematic decline in barrel exports. The want of lubricating oil was even felt by the large exporting firms, who have their own lubricating oil refineries at Baku. In this connection it is interesting to record the dissolution of the lubricating oil syndicate; the Russian members, for want of oils, were unable to carry out deliveries undertaken by them. It is still uncertain whether the syndicate will be revived in the future or not.

The following are the figures of the deliveries of oils from Baku to Batoum, and shipments from Batoum in 1905:—

	Arrivals from Baku. Poods.	Shipments. Poods.
Refined Kerosene	18,513,000	28,180,000
Kerosene Distillate	—	2,080,000
Solar Oil	1,993.000	1,573,000
Machine Oil	5,011,000	5,514,000
Spindle Oil	461,000	561,000
Cylinder Oil	138,000	162,000
Vaseline Oil	—	304,000
Lubricating Oil Distillate ..	247,000	726,000
Residuals	910,000	332,000
Other Products ..	23,000	—
Total	27,296,000	39,432,000

The average monthly arrivals from Baku work out at about 2,300,000 poods, and the exports at 3,300,000 poods. There was thus every month a deficiency of 1,000,000 poods supplied out of stocks. The latter have been gradually declining, until at the end of the year they reached almost vanishing point.

A comparison of the exports of the various products in 1905 with the corresponding figures for 1904 shews that kerosene, including distillate, declined by 31,000,000 poods; solar oil declined by 3,943,000 poods; lubricating oils by 3,780,000 poods.

The quantities exported from Batoum in 1905 by the principal firms were:—

	Poods.
Nobel	11,600,000
Caspian and Black Sea Society (Rothschild)	6,970,000
Mantascheff	6,030,000
Oleum (Russian Petroleum and Liquid Fuel Co.)	2,250,000
Caspian Society	2,530,000
Schibaieff Co.	1,760,000
Gehlig, Wachenheim and Co.	1,530,000
Tank Storage and Carriage Co., Ltd. ..	1,034,000

Compared with the former year, Nobel's have reduced their exports by one-half and Rothschild's by nearly two-thirds. Rothchild and Mantascheff have lost mainly in the case oil exports, their case oil works having been idle almost the whole year.

The shipments to different countries were:—

	Poods.
To Russian Home Ports	2,730,000
,, England	12,022,000
,, France	4,532,000
,, Germany	2,815,000
,, Holland and Belgium	3,738,000
,, Italy	1,040,000
,, Other Countries of Western Europe ..	1,650,000
,, Africa, including Alexandria, Turkey and the Balkan Peninsula	6,377,000
,, the Far East	4,528,000
Total	39,432,000

Compared to last year, the exports to England have declined by 8,000,000 poods; to France, by 7,000,000 poods; and to Belgium and Holland, by 4,000,000 poods. The export to Germany has increased by 100,000 poods, whilst shipments to Far Eastern markets have decreased by nearly 12,000,000 poods, and to Turkish ports by about 50 per cent. The decline in exports to the Near and Far East is due mainly to the closing of the case oil works. The shipments to Russian home ports fell short by 1,000,000 poods. There has been a slight increase in the shipments of refined illuminating oil to Italy, which is due to the increased activity of the Standard Oil Co.'s case oil works in that country. Thanks to the cessation of the export of case oil from Russia, the Standard's case factories have glutted the markets in the Near East with their case oil, obtaining for it the fabulous price of 9 francs per case. At Constantinople, no case oil of foreign origin was quoted below 5½–6 francs. In order to prevent the Standard Oil Co. from taking firm root on the Egyptian market as a result of the closing of the Russian case oil works, the Mantascheff Co. transferred part of their plant and machinery to Alexandria, where they have equipped a case factory capable of turning out 10,000 tins daily. According to the latest information to hand, this establishment is working successfully, and is distributing its products on the neighbouring markets of North Africa and Asia Minor.

◆

DETAILS CONCERNING THE PRODUCTION OF CRUDE OIL IN GALICIA IN 1905.

Our contemporary, *Naphtha*, in its latest issue, supplies some further details and explanations regarding the Galician petroleum producing industry, the official statistics of which were published in the Review a few weeks ago.

The most striking fact in these statistics, it points out, is that they do not shew any further increase in production, but, on the contrary, shew a slight decline from 827,116 tons in 1904 to 801,796 tons in 1905, or by 25,320 tons.

The steady growth of the production, which began in 1900 and in that short space of time brought the total output from 300,000 to 800,000 tons, has for the moment come to a standstill. It would be erroneous, however, to conclude that the production of crude oil in Galicia has reached its highest limit, and that henceforth it will decline. It was only in 1901 that the production began to rise rapidly, with the development of the Boryslaw oil field. In the same manner as the development of the Schodnica field sent the output up in the nineties, so the opening up of Boryslaw shews its effect on the total output since the beginning of the new century.

The output of the Boryslaw field was :—

	Tons.		Tons.
1898 ..	13,000	1902 ..	226,000
1899 ..	18,000	1903 ..	373,000
1900 ..	55,000	1904 ..	546,000
1901 ..	132,000	1905 ..	546,500

In the last two years, in the output of Boryslaw was included the production of the neighbouring field of Tustanowice. The above figures shew that the decline in the total production for the year was not caused by any decrease in the output of the Boryslaw-Tustanowice field, as the latter shews even a slight advance. We must, therefore, look for the cause of the decline to the other fields, the output of which in the last two years was as under :—

	1904.	1905.
Potok	22,864	22,479
Rogi	47,531	24,234
Rowne	2,454	1,609
Tarnawa-Wielopole..	10,707	32,956
Krosno	48,228	43,559
Other West Galician fields ..	34,411	35,607
Schodnica	72,627	60,201
Urycz	27,420	20,346
Mraznica	4,915	3,646
Other East Galician fields ..	9,909	10,600

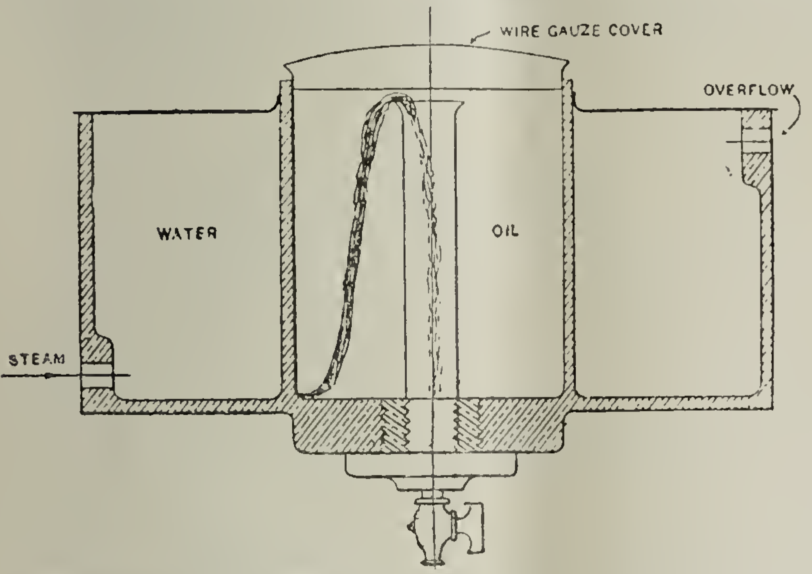
We see from the above that it is the Rogi field which has brought about the decline in the total production, the output there having fallen by 23,297 tons, which is nearly the whole difference between the total productions of 1904 and 1905. Other facts to be noted are the substantial rise in output at Tarnawa-Wielopole and the decline at Schodnica. Of these three fields, which, after Boryslaw, are the largest in Galicia, Rogi is the most peculiar, as in 1903 and 1904 it suddenly assumed considerable importance, whilst in 1905 it disappointed the hopes put on it. The Schodnica field, on the contrary, has proved to be one of the most durable ones, as after 15 years continuous exploitation it is still yielding without any great efforts, and mainly by the pumping of old wells, a very substantial production, and still occupies the second place among the oil producing fields of Galicia. Among the other fields not specifically mentioned in the above table are :—In West Galicia—Wankowa, Wojtowa, Zmiennica, Ropienka, Harklowa and Spas. In the Krosno group are included the fields at Weglowka, Lipinski, Humniska, Kroscienko, Kryg and Kobylanka in the order of their productivity. In the East Galician fields are included Sloboda Rungurska, Pasieczna, Bitkow, and Kosmacz.

The bulk of the output in Galicia, amounting to about three-quarters of the total, falls not on the Boryslaw field, but on the Boryslaw-Tustanowice fields. The Tustanowice field has appeared as an important producer for the first time in 1905. Of the aggregate output of the two fields of 546,500 tons, Tustanowice supplied about one-tenth, which approximately represents a decline in the output of Boryslaw proper. This is a rather disquieting fact in itself, as it forces us to the conclusion that the Boryslaw field, restricted as it is in area, has already reached its highest limit in production in April last year with the record monthly output of 55,000 tons, and provided nothing unforeseen happens, we must be prepared for a continued natural decline in output. Happily, this is compensated by the opening up in the adjoining Tustanowice field and its extension towards Ponerle, where there are petroleum deposits similar to the Boryslaw deposits, and it is evident that Tustanowice is destined to make good any shortage in the output at Boryslaw. The oil-bearing zone at Tustanowice is far more extensive than at Boryslaw, affording more room for development of a petroleum production. The prospects of the Galician petroleum industry are, therefore, fairly satisfactory, and there is no reason to become unduly alarmed over the decline in output in 1905.

United States Government Tests of Lubricating Oils.

By Mr. A. B. WILLITS, of the United States Navy.

In a recent issue of the American *Iron Age*, the above subject is discussed at length by Mr. Willits, of the United States Navy. He states at the outset that the selecting of the best lubricating oils for the machinery of the United States naval vessels has become a momentous question during the past year, owing to the decision of the department to disapprove requisitions for special brands, and in lieu thereof to purchase in open market entirely on specifications. For many years lard oil was the recognised standard, but with the advent of engines of greater power coincident with the development of a cheaper and better lubricant in the petroleum oils, lard oil with its unsavoury odour and high cost became a back number, and a few particular brands of mineral oils were carefully compounded for the particularly trying service, into such prominence as to practically give them the monopoly in the navy.

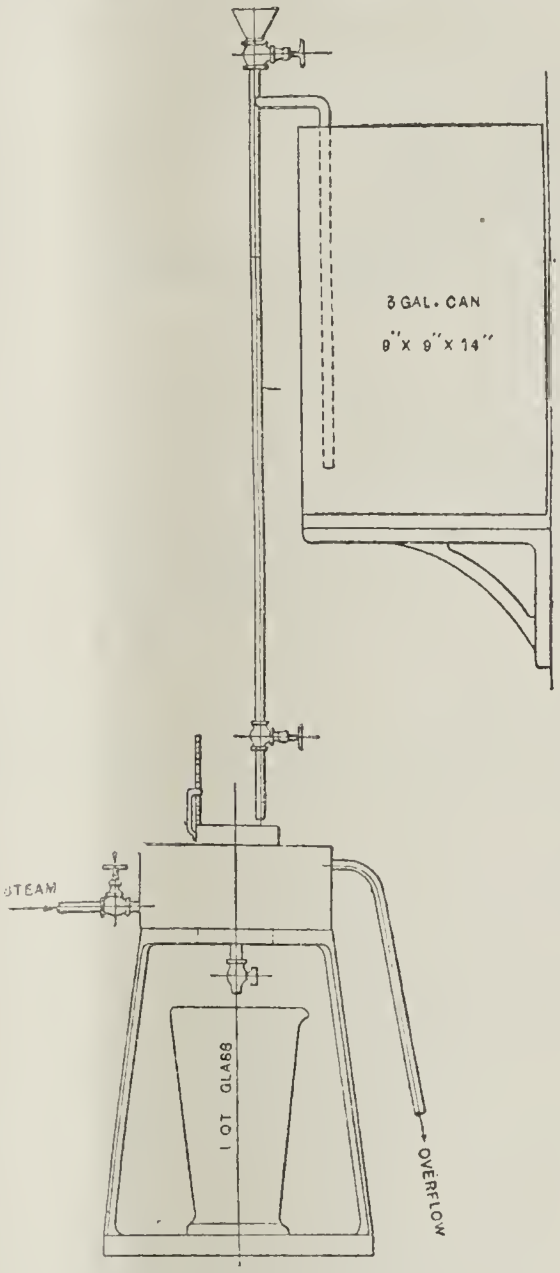


Device for Testing the Gumming Tendency of Oil.

It was quickly discovered that there was a chance for competition in this field, offering a good return, and there soon came a demand for the privilege of bidding from every oil compounder, many of whom had little appreciation of the requirements. In admitting all, the only protection lay in specifying in detail such qualities as must characterise acceptable oils. Fortunately the experience with the special brands enabled the Bureau of Steam Engineering to formulate precise specifications, which would eliminate such oils as would have to be used in excessive amounts to keep the bearings efficient, or would endanger these bearings by failing to maintain an effective film under high speeds, pressures and temperatures.

To appreciate how important this is, take for instance an armoured cruiser like the "West Virginia" or "Pennsylvania," ships developing 23,000 indicated horse power, which at, say, 18 knots per hour, require about 200 gallons of best mineral oil per day for proper lubrication. With a poorer grade the quantity must be increased, and the danger of hot bearings arises. The brasses for one main engine crank pin weigh 450 pounds and require about 100 pounds of Babbitt metal, and when this is overheated and burnt out by bad lubrication, it is no trifling job to disconnect and reline the boxes, while the time at which such crippling occurs might cause the defeat of a manœuvre or the loss of a battle. It is natural and proper, therefore, that naval engineers should resent all movements toward loading up with any but excellent oils.

In March, 1905, specifications for lubricating oil for marine machinery were issued, embracing a frictional test on an oil testing machine, using a standard brass bearing of about nine square inches projected area on a polished steel mandrel making about 160 revolutions per minute, in which test the limit of temperature was designated to be 130° F. The average load on the bearing during two hours' test must be at least 300 pounds per square inch of projected area, the quantity of oil necessary to prevent undue friction and higher rise of temperature being taken into account in the results, and the quotient found by dividing the product of the average total pressure on the journal and surface speed of journal in feet per minute by the weight of oil in grains for lubrication during the two hours, not to fall below 325,000. The flashing point must not be below 400° F. Sufficient oil to cover the bottom of a shallow dish when heated to 250° F. and cooled slowly must exhibit no gummy residue. The oil must flow at a temperature of 32° F. A small quantity when applied to a polished copper plate must not turn the surface of the metal green if allowed to stand exposed to the air for 24 hours. The viscosity of the oil at 90° must be between 685 and 710 compared with distilled water (49) at 90° F. When tested in an Engler viscosimeter, using the same standard, the viscosity of the oil at 150° F. must be between 155 and 165, and at 225° F. between 75 and 85.



The Complete Apparatus for Making Gumming Tests.

It was found that the greater number of failures consisted in unsatisfactory viscosity at the different temperatures, and this point alone is a most important guide in selecting good oil. Later experiments, however, proved that an additional gumming test was necessary to prevent the acceptance of unsatisfactory grades, and a special test has now been added, as follows:—Using a single wick, half pint brass oil cup, and maintaining the oil at about 140° F., practically equal quantities of oil must feed through the wick in equal intervals of time, for three intervals of eight hours each. At the end of the test the wick must be clean and the sides of the

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	11/16-13/16
Baku Russian Petroleum ..	£750,000 Ord.	£1	2/9-3/3
,, ,, ..	£650,000 5½% Pref.	£1	6/9-7/3
Bibi-Eybat Petroleum Co. ..			10/6-11/6
Californian Oilfields	£250,000 Ord.	£1	6¼-6½
European Petroleum.. ..	£550,000 Pref.	£1	3/0-4/0
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	81-86
Russian Pet. & Liquid Fuel ..	£500,000 6½% Pref.	£1	12/6-13/6
,, ,, ...	£600,000 Ord.	£1	12/6-13/6
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	3½-3¾
,, ,, ...	£575,000 Ord.	£1	9/6-10/6
Shell Transport & Trading ..	£2,000,000	£1	24/6-25/6
,, ,, ,, ..	£1,000,000 Pref.	£10	9¼-9½
Spies Petroleum Company ..	£312,500	10s.	7/0-8/0

SCOTCH COMPANIES.

Supplied by Messrs. Maclean and Henderson, Stirling.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. 8½ pd	£199,750	£10	17½
Do. 6% Cum. Pref. ..	£100,000	£10	12½
Burmah Oil, Ord.	£1,100,000	£1	26s. 9d.
Do. Pref.	£250 000	£1	26s. 0d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	8½
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	18
Do. New (£8 10s. pd.)	£131,750	£10	16¼
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	80s. 6d.
Do. 6% Cum. Pref.	£100,000	£10	12⅞
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	31s. 0d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	64s. 0d.
Do. "B" Deb...	£150,000	£100	148

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on Feb. 26.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	477	480
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	4,000	4,050
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	172	174
Neft Co.	250	—	—
Nobel Bros.	5,000	8,600	8,700
,, ,, ...	250	—	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

DUTCH COMPANIES.

Company.	Quotations Feb. 21st.	Quotations Feb. 14th.	Florins.
Arnhemsche Petroleum Mij. ..	80	80	1,000
Dordtsche Petroleum Mij. (Pref.) ..	126	126	500
,, ,, ,, (Deb. 4½%)	102¼	102¾	1,000
Elzasser Petroleum Mij.	2¼x44%liq	45	1,000
Gaboes ,, ,, ...	19¾	19¾	—
Holl. Rumeensche Petroleum Mij...	24½-24⅞	24	1,000
Int. Rum. Pet. Mij.	89	89½	500
Java Petroleum Mij...	30	30	1,000
Koninklyke Nederl. Pet. Mij. Shares	472-479½	448¼-452	250-1,000
,, ,, Share certificates	478-480	450	1,000
Mœara Enim Petroleum Mij. ..	116¾-117	116¼-116¾	100
,, ,, 1-1,000 Oblig. 5	102	102	250-1,0
"Moesi Ilir" Petroleum Mij. ..	35	36	—
Nederl.-Rumeensche Petroleum Mij.	16	16	
Nieuwe Ned. Petroleum Mij. And...	55¼	55¼	1,00000
Oliebronnen in Hannover Mij. ..	175	174	—
Panolan Maatschappij Cert. ..	340xd.	340 x.d.	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	138	138½	1,000
,, ,, (Common) ..	92¼	92	—
Sumatra-Palembang Petroleum Mij	60	61	500

oil cup bright and clean. The accompanying sketch shews the oil cup device arranged for carrying out this gumming test. It is a single double cup casting, the outer part of which is kept filled with hot water, maintaining readily the temperature of the oil at about the required limit by adjusting the steam admission valve. The other illustration shews the arrangement complete for the test. The syphon pipe may be readily applied to one of the ordinary five-gallon cans in which oil is now delivered for Government use. This enables the haphazard selection of any can on a lot, and as it draws the oil from the bottom of the can, its worst features are exposed if it contains a gummy sediment.

Where the continuous three periods of eight hours each are not practicable, the test is stopped by closing the lower petcock on the oil cup, the steam blow-off valve and the oil admission valve in the syphon pipe, and continued on the following day without having disturbed the wick by first heating the oil by the water bath to the required temperature before opening the bottom drip cock. The height of oil in the oil cup is maintained between two marks on the inside of the cup to a fair height. The thermometer is kept in the oil, and the drip from the cup is caught in a one-quart graduated glass, which, when filled to the quart mark, is replaced by an empty glass and record made, together with the fractional parts at the end of each eight-hour period.

Some manufacturers consider this test severe, but the best oils in use have successfully passed and practically filled the conditions required.

CASUALTIES TO PETROLEUM VESSELS.

BAKU STANDARD (s.).—*Havre*, February 24th.—The steamer Baku Standard, from Kustendji, carrying petroleum, when entering the Petroleum Dock this morning, struck the quay wall, damaging three plates and one frame above the water line.

EUPLECTELA (s.).—*Cuxhaven*, February 19th.—The steamer Euplectela, for Philadelphia, having anchored in the roads owing to damage to machinery, is now proceeding safely. (Since passed I. of W., February 20th.)

HARRY WADSWORTH (s.).—*Norfolk*, February 12th.—The British steamer Harry Wadsworth, from Port Arthur, arrived at Norfolk, February 9th, with bad leak, docked at Newport News for examination.

◆

Petroleum in India.—Of the 22,500,000 gallons of kerosene imported into Bombay during the past twelve months, Russia is credited with over 17,000,000 gallons, and of the remainder, over 3,500,000 gallons came from Borneo.

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Saturday, March 3rd, 1906.

OIL AS AN ILLUMINANT.

To those who have given some amount of attention to the subject, it must be apparent that of the many questions which await solution in connection with the petroleum industry, none are of more importance than that of the position which oil occupies in this and other countries as an illuminating power. From the now distant days when the petroleum industry commenced to play part in the world's commerce, an almost unlimited amount of capital and energy has been thrown into it. Territories have been opened out in quick succession, and production has risen with a rapidity which is little less than marvellous, while vast organisations have sprung into being, destined either to give increased facilities to the transport of the oil or to distribute it upon the various markets of the world.

It can truly be said that whether we look upon oil as an illuminant, a heating agent, or a generator of power, its sphere of usefulness is practically unlimited. But it does not necessarily follow that all the opportunities for the use of an article are taken advantage of, and this most certainly does apply in the case of oil as an illuminant. It has, we admit, made marked strides during past years as an economical and bright light giver, but whether that progress has been in proportion with the advance of the times is a totally different matter, and one which should not be overlooked.

The fact is that upon many hands we have evidence that the use of oil as an illuminant is on the decline. Take the figures of which country we may, it will be found—with only a very few exceptions—that the march of progress in this respect has come to an end, and a movement of a retrograde nature has taken its place.

There is no need to go far afield to find proof of a convincing nature of the change which has overtaken the illuminating oil industry of late. Gas and electric light have waged a bitter war, and powerful monopolists have urged the claims of these rival illuminants upon the public with great success. Wherever we go we see what an amount of enterprise has been exercised by those responsible for the gas and electric light industry in this country in order that it may gain a strong hold upon the populace. In the case of gas we are especially struck with the results of the efforts put forward to make it a popular, illuminating, heating and cooking agent. Every possible inducement has been placed before the public, and in this regard the poorer classes have not been overlooked. The pre-payment penny-in-the-slot meters have robbed the petroleum industry of many thousands of consumers, and consequently a large section of users of oil for lighting purposes has been irretrievably lost. The change has been steady yet continous, and the result we are just beginning to see.

Last year, for instance, 160,000,000 gallons of illuminating oil were used in this country—admittedly a very large amount—but still considerably less than that for the preceding year, in fact a decrease of nearly 20,000,000 gallons. France, Belgium, Germany and other continental countries each tell a similar tale of declining imports of illuminating oil, which fact proves that oil for illuminating purposes is less in favour now than was the case formerly. It is not that less light is required, it is simply the victory of one illuminant, strenuously popularised, over another which has been left to look after itself.

The petroleum industry has shut its eyes to the important fact that competition must be met at any cost, or ground will be lost. It has failed to arouse itself to recognise that something must be done to first make the merits of oil as a cheap lighting, heating and cooking agent more widely known, and then to keep these merits constantly before the public, and the consequence is that both gas and electricity have reaped a substantial benefit to which oil is justly entitled.

Argue about the question as much as you like, there is no gainsaying the fact that oil as an illuminant has lost many opportunities, and is to-day becoming less used both by the rich and the poor, and if the retrogression is not prevented making serious inroads and undermining the great trade which is being done in the product, the matter will very soon stand out in all its seriousness to the most casual observer. Thus far considerable loss has followed as a consequence of the fight for supremacy among the illuminants, and this loss is intensified on account of the fact that those who are interested in the industry have stood idly by and contentedly witnessed the fray. Had all the illuminants stood upon their merits, we doubt not that the consumption of illuminating oil in this country alone would be many times greater than it is at present, but this has not been the case. The claims of gas and electricity have been shouted from the house-tops, and simultaneously the merits of oil have been assailed. No one has come forward to take up the attack, and hence it is no surprise that a declining demand has set in.

A remedy must be forthcoming, and that speedily. The firms interested in the supply and distribution of oil upon the English markets should lose no time in preparing themselves for propaganda work, and throughout the country a mission should be commenced, and the many claims of oil as an illuminant boldly put before a now prejudiced populace. No sacrifice in this direction can be too great, for one of the most important branches of the petroleum industry is threatened. There is a real necessity for something to be done, and unless the matter is taken up in grim earnest, the outlook is gloomy. The powerful distribution firms in England have been created at enormous expense, and the machine-like organisation, which is the outcome of untiring energy and perseverance, will soon find the ground cut from under its feet if the present trend of events is not stayed. There may be an unlimited supply, but this will count as little if the demand does not exist.

The matter, too, is of the greatest interest to the producers, and it behoves them equally with the distributors to gird themselves for the fray, and to see, by the institution of lectures, exhibitions and the like, that the claims of illuminating oil reach the ears of those who, under pressure from other directions, are no longer to be counted among the users of illuminating oil.

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LONDON OIL SHARE MARKET.

Friday, March 2nd.

There has been scarcely any movement in the Oil Share group of the London Stock Exchange since our last issue, prices having been merely repetitions of the previous day's quotations, and the only alteration on balance being an advance of 3d. per share in Baku Ordinary, one per cent. in European Debentures, and a decline of 6d. in Russian Ordinary and of $\frac{1}{8}$ in Californian Refineries. For a *résume*, Saturday's quotations were as follows:—Anglo-Russians $\frac{1}{16}$-$\frac{1}{8}$, Assam Oil $\frac{5}{8}$-$\frac{7}{8}$, Baku Ordinary 2s. 9d. to 3s. 3d., Preference 6s. 9d. to 7s. 3d., Bibi-Eybats $\frac{1}{2}$-$\frac{5}{8}$, Debentures 88-93, Californian Oilfields, $6\frac{3}{8}$-$6\frac{5}{8}$, Californian Refineries $\frac{1}{2}$-$\frac{5}{8}$, European Preference $\frac{1}{8}$-$\frac{1}{4}$, Debentures 80-85, Russian Ordinary 14s. to 15s., Preference 13s. 6d. to 14s. 6d., Debentures 89-92, Schibaieff Ordinary 10s. 3d. to 10s. 9d., Preference $3\frac{3}{8}$-$3\frac{5}{8}$, Shell Transport Ordinary 24s. 6d. to 25s., Preference $9\frac{1}{4}$-$9\frac{3}{4}$, and Spies $\frac{11}{32}$-$\frac{13}{32}$.

On Monday, Bakus were a stronger market at 3s. to 3s. 6d., while Russian Ordinary lost 6d. at 13s. 6d to 14s. 6d., and no further changes took place until Thursday, when European Debentures were marked up one per cent. to 81-86, while Californian Refineries lost $\frac{1}{8}$ at $\frac{3}{8}$-$\frac{1}{2}$.

To-day's prices are quoted in full on page 168.

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The Berlin Correspondent of the *Moniteur du Petrole Roumain* announces the establishment at Hamburg of a firm called the Russia-American Oil Co., which, he says, is a branch of the company of the same name existing in London.

[A few details of the London company would be interesting.—Ed. *P.R.*]

ROUMANIAN NOTES.

The Vega Refinery.—A few days ago the Credit Petrolifer exported the first cargo of oil produced at the Vega refinery.

Steaua Romana Output.—The output of the Steaua Romana is still small, even less than last month. The output of the Bustenari Co. is maintained at a high level, whilst the Telega Oil Co. has raised its output to 210 tons daily.

Roumanian Oil Prices.—Oil prices in Roumania are firm, with a tendency to rise in view of the small supplies on the market. The total output of crude oil is certain to shew a fresh decline, as the Romano-American Co., according to the *Moniteur du Petrole*, has lost nearly the whole of its output at Moreni, as a result of the watering and damaging of their producing wells.

The Coming Exhibition.—It has now been finally decided that the various Roumanian petroleum firms shall be represented separately at the forthcoming Jubilee Exhibition at Bucarest. The Bustenari, Telega, Vega and Credit Petrolifer Companies will exhibit their products in one special pavilion. The Aurora, International and Trajan Companies will have their exhibits in the Pavilion of Industry.

Works Extension.—The sulphuric acid works at Albeshti, in Roumania, which have lately been working very actively, have now been enlarged to enable them to supply the needs of the new petroleum refineries recently established in Roumania. The company owning these sulphuric acid works will increase its capital by 300,000 francs, whilst the works will be made capable of producing 8,000 tons of acid per annum, or about double their former capacity.

The Institute of Geology, the creation of which has been sanctioned by the Roumanian Parliament, will come into existence on the 1st of April. The superior staff of the institute will consist of—Dr. Louis Mrazec, director; Dr. Popovici-Hatzeg and Munteanu-Murgoci, geologists; Mr. Radu-Pascu, the present chief of the mining department, will be chief engineer of the institute. The institute will for the present be located at the Ministry of Domains, and will consist of the museum and geological laboratory of the Ministry.

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THE GALICIAN PRODUCERS AND THE "PETROLEA."

A meeting of Galician petroleum producers has recently taken place at Drohobycz to consider the present condition of the crude oil industry and the report of the committees appointed for modifying the regulations of the Petrolea Co., and the committee appointed to consider proposed modifications in the interior organisation of the industry and relations with the refiners' cartel. After due discussion the following resolutions were passed as instructions to the committees which are negotiating with the refiners:—

(1) The refiners have in the first place to take from the Petrolea Co. the whole of the crude oil required for the home consumption, at the rate of two tons of crude oil for every ton of refined illuminating oil, and there is to be no further reduction in price.

(2) Only after all the crude oil for home consumption has been purchased may the Petrolea Co. enter into contracts for supplying export crude oil.

(3) In regard to the proposal of the refiners for the construction of a plant for eliminating the benzine from the crude oil, the committee are given a free hand.

It was further resolved that henceforth the purely producing firms should be on an equal footing in the Petrolea Co. with the producing and refining firms, and in the event of this being agreed to by the Petrolea, all producers are recommended to join it.

THE ROUMANIAN REFINERS' CARTEL.

Negotiations have now commenced among the Roumanian petroleum refiners with a view to the renewal of the cartel for the sale of illuminating oil, which expires in April. The situation has now entirely changed in the Roumanian refining industry, with the commencement of operation of the new refineries of the Vega and Romano-American Companies, and of the refinery of the Steaua Romana in its enlarged condition. Hitherto the leading spirit in these negotiations was Mr. S. Herzog, in his capacity of business manager of the Steaua Romana. Now that Mr. Herzog has retired from the Steaua the principal part in the negotiations has been taken over by Mr. Schlawe, general manager of the concerns controlled by the Disconto-Bleichroeder group. Mr. Schlawe has had interviews regarding the cartel with all the principal refiners in Roumania. The situation is rendered difficult by the fact that neither the Romano-American Co. nor the newly-formed Trajan Co., owners of the Cernovoda refinery, shew any desire to join the new cartel.

Mr. Schlawe, pointing to the crude oil production of the Bustenari and Telega Oil Companies, which exceed that of the Steaua Romana, and to the Vega refinery, which has been built on the most improved lines, claims a share in the cartel at least equal to that of the Steaua Romana. The other large refineries, such as the Aurora and the Aquila Franco-Romana, also claim an increase in their respective quotas. The Aquila justifies its claims by the fact that in 1905 it exported 55 per cent. of the total Roumanian petroleum exports, having purchased the largest part of the products which the Steaua Romana had available for export. Without the intervention of the Aquila the exports of the Steaua would have been much smaller than they were.

The Romano-American Co. seems to be determined to maintain their freedom of action. It is therefore quite impossible to fortell what the outcome of the cartel negotiations will be.

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RUSSIAN NOTES.

More Government Loans.—The Committee for the granting of the Government loans to petroleum producers at Baku has resumed its sittings, and has made advances to 15 more firms, of an aggregate amount of 381,000 roubles.

The Baku Exchange Committee, at a recent meeting, resolved to petition the Government to permit the question of the imposition on excise duty on lubricating oils to be considered at the meeting of the Baku Petroleum Association, which was held yesterday.

To Regulate the Transport of Petroleum.—In order to regulate the transport of petroleum on Russian inland waters, a special committee has been appointed at the Ministry of Communication to elaborate fresh regulations for the transport of such products to take the place of those now in force.

Messrs. Nobel Bros.' Meeting.—The annual meeting o Nobel Bros. is called to take place at St. Petersburg on March 12th. The subjects on the agenda are: (1) The adoption of the directors' report for the past year and estimates for the year 1906; (2) to sanction the purchase of new plots for the erection of depôts, and also of petroliferous lands; (3) to receive the directors' report on the condition of the trade in petroleum products abroad.

AMERICAN NOTES

Oil Town almost wiped out.—The oil town of Littleton, in Wetzel county, West Virginia, has been almost wiped out by fire. Four-fifths of the buildings were wiped out, and over 1,000 people rendered homeless.

Standard Oil Dividend.—The directors of the Standard Oil Co. have recently declared a quarterly dividend of $15, absorbing $15,000,000. This compares with $10 for the previous quarter and $15 for the corresponding quarter of last year.

The Markets.—The American crude oil markets have remained unchanged for the past five or six weeks, except for an advance of five cents a barrel for the Casey, Ill., product, and a strengthening of the quotations for the South-East Texas product.

The New Producers' Organisation.—The mid-Continent Oil Producers' Association is the title of an organisation which has recently been formed among the producers of Kansas and Indian Territory, the sole object being to discuss and adopt the best business methods for the producing of crude oil.

Deep Drilling.—The South Penn Oil Co. is now engaged upon a deep test well at Rattlesnake Point, overlooking its holdings west of Hickory. The territory has been producing for many years, but it is thought that a fresh productive stratum will be touched at a greater depth. The well is now down to 3,000 feet.

Another Outlet for Jennings Oil.—The new pipe line of the Texas Co. from the Jennings field to Lake Charles, on the Kansas City Southern railroads is about to be completed, after a few delays. This will give Jennings oil another outlet by rail, the Southern Pacific line being the only one at present handling the oil business.

Leamington Production.—The crude oil production of the Leamington oil field for January amounted to 6,000 barrels. One of the latest strikes in the field is that of the Acme Oil Co., of Detroit. The well was brought in at a depth of 1,450 feet, and has since been doing about 15 barrels per day, but on some days has done as much as 40 barrels.

A Good Strike in West Virginia.—We are informed upon good authority that one of the best strikes encountered for many months in West Virginia fields was struck a few days ago. The new well is on the property of the Southern Oil Co., in Tyler county, and is producing at the rate of 480 barrels per day. It was the intention of the drillers to proceed deeper, but drilling has now been suspended.

Kansas Production Increases.—The details of the January production of the Kansas and Indian Territory fields, as given in the *Bartlesville Examiner*, shew that the first month of the year was a very heavy one for production. In fact, in spite of the fact that storage accommodation is being erected practically night and day, the oil could not all be taken care of, and consequently drilling in many cases has had to be suspended.

Monthly Statistics.—The *Oil Investors' Journal* states that the gross production of the Texas-Louisiana districts for January was about 1,800,000 barrels. This was divided between Jennings, 693,000 barrels; Humble, 402,000 barrels; Sour Lake, 201,000 barrels; Spindle Top, 99,000 barrels; Saratoga, 168,000 barrels; Batson, 273,000 barrels; and Dayton, 13,000 barrels. The average daily production was therefore close upon 60,000 barrels.

Revival of the Gulf Pipe Line Scheme.—The American papers are now devoting considerable space to the pipe line project from the mid-Continental oil fields to the Gulf of Mexico. It is reported that the Pure Oil Trust is prepared to carry out the scheme under certain conditions, which are, that when 1,000,000 dollars' worth of stock has been subscribed they will commence operations. It is further reported that up to the present almost one quarter of this amount has been subscribed.

An Oil Lease War.—The striking of oil in paying quantities has caused considerable excitement at Majorsville, and commenced an oil lease war among three operating companies. The Virginia Oil and Gas Co., out of 22 wells drilled, secured only one dry hole. They were followed by the Natural Gas Co. of West Virginia and the Ohio Valley Gas Co., the three companies gobbling up all the territory within ten miles of Majorsville. Many blanket leases have been taken by all three gas companies.

IMPROVEMENTS IN THE APPLICATION OF OILY MATERIALS TO ROADS AND OTHER SURFACES.

A patent has recently been granted to H. Otto Brandt, of Sackville Street, Manchester for an invention which embodies improvements in the reducing of oily matters to a fine state of sub-division, and in applying the same to roads and other surfaces. The inventor points out in his provisional specification that difficulties are encountered in the application of oil materials, such as petroleum and heavy coal tar oils to the like of roads and permanent ways of railroads, and although attempts have been made to overcome the difficulties by converting the oily materials into a more or less permanent emulsion with water, the preparation which possessed the requisite degree of stability has involved considerable cost.

The present invention consists in reducing the oily material to a fine state of sub-division by the aid of any convenient appliance attached to the movable apparatus which distributes the oily material upon the road or other surface, and immediately the oily material has been reduced to such state of sub-division throwing it out upon the road or other surface by the aid of a spray, jet or stream of water. By this method of procedure the oily material is retained in such a fine state of sub-division as facilitates its even distribution during a length of time sufficient for it to reach the surface of the road or other surface to which it is applied.

The invention is applied in its simplest form by the aid of a watering cart provided with reservoirs of water and of oily material, which reservoirs deliver their contents at rates which can be separately regulated into the drum of a centrifuge driven from the axle of the watering cart or otherwise. The mixed oily material and water expelled from the centrifuge pass directly on to the surface to be treated through conveniently arranged distributing pipes.

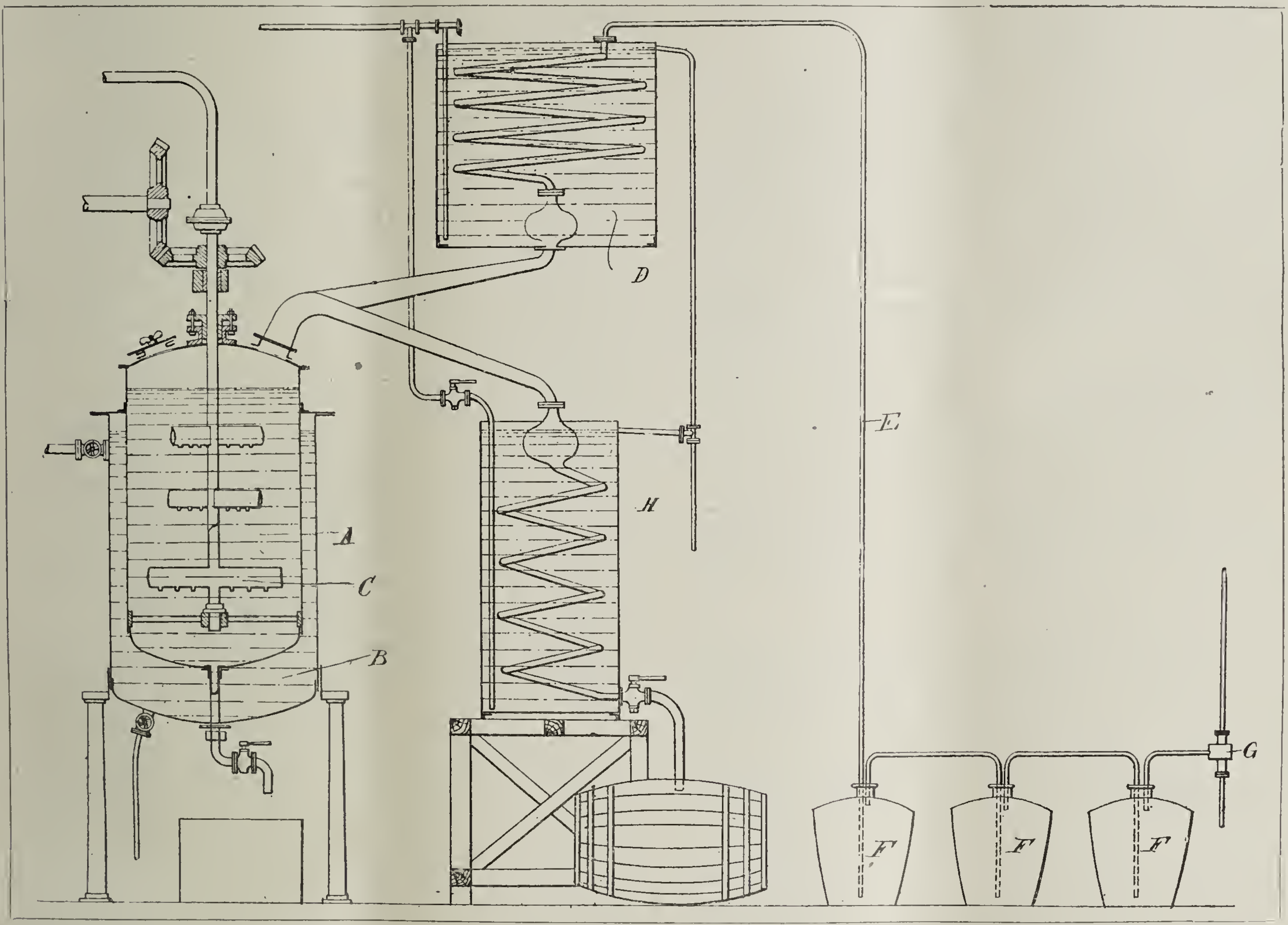
The drum centrifuge in which the oily material is reduced to a fine state of sub-division may be replaced by a rapidly rotating disc, by a blast of air or steam or by any other known contrivance, by the aid of which oily materials can be reduced to a fine state of sub-division.

The appliance for finely dividing the oily material may be driven by a separate motor or in any other way which may be found convenient in place of being driven from the axle of the watering cart.

The water may be replaced by aqueous solutions, and when found desirable one or more than one oily material may be reduced to a fine state of sub-division, and distributed after admixture with one or more aqueous liquids or solutions in the same appliance.

The perambulating distributing cart may also be replaced by an appliance to be used whilst stationary, in which oily materials are reduced to a fine state of sub-division in the manner described above, and the finely sub-divided oily material is then propelled out from the appliance by a jet or aqueous liquid. Such an appliance may be conveniently used amongst other purposes for the spraying of finely divided petroleum or other disinfectant upon growing vegetation.

The Manufacture of Non-Inflammable Products from Benzine.



A patent has recently been granted to Mr. Henry Birkbeck, of the firm of Messrs. Tongue and Birkbeck, of Birkbeck Bank Chambers, Southampton Buildings, Chancery Lane, London, W.C., on behalf of Professor Egard Barthélemy Barboni, of 27, Rue Poissonière, Paris, France, for an invention relating to non-inflammable benzine and the manufacture thereof.

By an exceedingly simple process, according to this invention, ordinary benzine can be readily and safely converted or transformed into non-inflammable benzine or products of benzine; and the invention also comprises, as a novel industrial product, the special kind of benzine (non-inflammable) obtained by this process, and the special means for carrying out said process or manufacture.

The process consists broadly in causing chlorine in a nascent condition to act on benzine in the presence of reagents which facilitate this chlorination, and the partial conversion of the benzine into polychlorinated derivatives C_6 $C_{6-n}Cl_n$, in which different values between 0 and 6 may be taken, the said polychlorinated derivatives remaining in solution in the mother liquor.

This transformation or action is effected in the presence of iodine and of carbon bisulphide, or in the presence of metalloidic chlorides such as the pentachloride of antimony and of carbon sulphide.

The following description is given by way of example of one way of carrying this process into practice.

To 100 kilogrammes of commercial benzine of any desired density are added 12 litres of carbon sulphide and 30 gr. of iodine which dissolve in the mixture. This clear liquid is placed in an enamelled cast iron vessel comprising a jacket or an inner coil for steam heating or for cooling by means of ordinary water in accordance with the requirements of the process. The lid of this apparatus is provided with two apertures, one of which is central and permits of the passage of the hollow shaft of an agitator provided with arms in which holes are formed, whilst the other aperture permits of connecting the apparatus to a condenser arranged above for the purpose of returning the vapours coming off the mixture and prevent losses.

Through the hollow shaft of the agitator is passed a current of dried chlorine which is mixed with the agitated mass. During the entire operation the upper part or extremity of the condenser is free and permits of the liberation of hydrochloric acid which is collected in a battery of carboys filled with water. In order to obviate an excess of pressure within the apparatus, it is advisable to provide some slight suction effect at the end of the battery.

The operation ceases when iodine chloride is deposited. One kilogramme of sulphur is then added to the cooled liquid through the man-hole or other closure provided for that purpose. The agitaror is caused to operate after the admission of chlorine has been interrupted. Communication between the vat and the condenser is then cut off, and this vat is placed in communication with the lower distillation condenser; a jet of steam is also caused to enter the jacket and the whole is distilled.

The distillate mixed with say half its weight of water is agitated in order to effect the decomposition of the chloride of sulphur. It is then allowed to settle for some hours, after which it is decanted.

This decanted portion, mixed with a solution of caustic soda of 5 per 1,000, is then agitated and again allowed to settle.

A second decantation is then effected and the product is dried (dehydrated) by any suitable means, such as passing it over calcium chloride. Filtration completes the treatment.

A constructional form of the apparatus which may be employed for carrying this process into practice is illustrated by way of example in the accompanying drawing, in which

A is the receptacle for the material under treatment.

B is the heating jacket.

C is the hollow agitator through which the chlorine is passed.

D is the condenser.

E is the conduit for the hydrochloric acid which is collected as it is formed.

F are the carboys for collecting the hydrochloric acid.

G is the suction nozzle.

H is the distillation condenser.

It will thus be seen that according to this invention the manufacture of non-inflammable products from benzine can be carried out by causing chlorine in a nascent condition to act upon benzine in the presence of carbon sulphide and of iodine or metalloidic chlorides, in such a manner as to partially convert this benzine into polychlorinated derivatives which remain in solution in the mother liquor; the invention also comprising the novel industrial product obtained by this process and the details described above for carrying the process into practice together with the apparatus represented in the accompanying drawings.

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COMMONWEALTH OIL CORPORATION.

The statutory meeting of the Commonwealth Oil Corporation, Ltd., was held at the offices, 26, Victoria Street, S.W., on Tuesday, Sir George Newnes, Bart., M.P., in the chair.

The Chairman said that the whole of the large capital of the corporation was subscribed without a single paragraph in any paper mentioning the name of it at all, simply upon its intrinsic merits, by those who were shrewd enough to find out what a great property had been acquired. The board of directors had been formed, and consisted of Sir William Avery, Bart., Mr. Leicester Harmsworth, M.P., Mr. Duncan Elliott Alves, Mr. William Blyth, and Sir George Newnes (chairman). The rich deposits of shale in the Wolgan and Capertee Valleys acquired by the company had (continued the chairman) been known for generations, but had been regarded as inaccessible. A projected new line, to be built by this corporation, the survey of which was almost complete, would open up these immense deposits; indeed, the latter part of the line would be tunnelled through what is practically a mountain of shale. It has been estimated that, taking out, when in full working, 600 tons a day, there is a sufficient quantity of what has been reported on as "the richest known shale in the world," to last eighty to one hundred years. Shale will be refined on the spot for supplying Australian and other requirements, and a large trade is also expected in export shale. Mr. D. A. Sutherland (the chief engineer of the company) will arrive in Sydney in a few days to take charge of the work. The Chairman concluded by stating that the shareholders would find that every month the value of their property would increase.

A vote of thanks to the chairman concluded the proceedings.

AMERICAN PATENTS GRANTED.

Well-Sinking Apparatus.—Matthew T. Chapman, Aurora, Illinois

A gripping device, adapted to grip a round article for rotating it without interfering with longitudinal movement thereof, consisting of a suitable support, and a plurality of sets of gripping devices carried thereby, said sets of gripping devices being arranged in different vertical planes, the gripping device consisting of a rotary disc mounted on a separate pivot, said discs being arranged so that one of the edges thereof will engage the article to be gripped.

Reservoir for Gasolene and other Vapour Burners.—Weston M. Fulton and William H. Richards, Knoxville, Tenn.

A reservoir having rigid side walls and a rigid end wall, a collapsible and expansible vessel closing the opposite end of said reservoir and movable within the latter, a rigid supporting plate fast to the end of the reservoir, a threaded rod, one end having a bearing in said plate, and provided with a nut travelling along said rod, and a member fast to the collapsible vessel and engaging said nut, whereby the rotation of said rod causes the said vessel to collapse or expand.

Crude Oil Burner.—Stephen E. McKnight, Iola, Kans.

In an hydrocarbon oil burner a frame, two grates removably placed on the top thereof, cross bars on said grates having depressions at the centre, an oil return pipe having its ends seated in said depressions, a casting with which the said return pipe connects, an old tube extended from said casting through said return pipe, and terminating inward of its inner end, a port leading from said return pipe through the casting into a mixing chamber having a reduced outlet in the frame, an air pipe having a portion arranged in the frame, and an ejector leading from one end of said air pipe into the mixing chamber.

Fluid Fuel Burner.—Frederick L. McGahan and Edward G. Flagler, St. Louis, Mo.

The combination with a plate forming part of the inclosing wall of a furnace, of a hot-air chamber carried by said plate, a mixing chamber provided with a contracted throat and a flaring outlet, and extending through said hot air chamber, a cap carried by said mixing chamber, a steam conduit extending through said cap, a fuel conduit extending through said steam conduit, an air pipe extending through said fuel conduit and longitudinally adjustable, an adjustable air inlet in said cap, and a hot air conduit connecting said hot air chamber and said mixing chamber.

Apparatus for Continuously Distilling Benzine and the like.—August H. L. Gerhardt, Bettenhausen, near Cassel, Germany.

The combination with a still, of a steam coil within said still, a steam supply tube connected with the one end of said steam coil, a stop valve inserted in said steam supply tube, a draining tube outside said still and connected with the other end of said steam coil, an internal steam tube within said still and reaching down to a point above the bottom, a branch tube connecting said internal steam tube with said steam supply tube, a stop valve inserted in said branch tube, a discharging device on the bottom of said still, an internal liquid supply tube within said still, a float controlled supply valve on the free end of said internal liquid supply tube, a heater comprising collecting chambers and connecting tubes for the reception of the heated medium, and a separate space for the medium to be heated, a tube leading from the source of supply to the latter space, a check valve located in such tube, a safety valve on the top part of said heater, and adapted for allowing any vapour developed from the preliminarily heated liquid to escape, a tube connecting the outlet of said safety valve with the top part of saids still, a perforating steam injecting tube within the space of said heater surrounding its heating tubes, a branch tube connecting said perforated steam injecting tube with said steam supply tube, and provided with a stop valve, a blow-off cock on the bottom part of said heater, an external liquid supply tube leading from the heater to the said internal tube in the still, a tube connecting the top part of said still with the heater, a condenser comprising a coil, a tube connecting the collecting chamber of said heater with the one end of the coil of said condenser, a series of draining tubes connecting the distributing chamber and the collecting chamber of said heater with said tube leading to the coil of said condenser, means for conducting a cooling fluid to said condenser, and for leading off the warmed fluid, and a tube connecting the other end of the coil of said condenser with the place for further treating the condensed pure liquid.

The American Oil Market.

New York, Week ended Feb. 17th.

The increasing strength of both the field and statistical situations in the Northern producing States is attracting considerable attention, and producers have become emphatic in their claims that prices should respond thereto. The pipe line reports for January shewed a decrease in production of about 127,000 barrels, as compared with the December production, while the deliveries shewed a falling-off of 42,000 barrels. The decrease in production was indicated by the field report, but it was thought the deliveries were larger. It is becoming more and more apparent that the production of the older producing States cannot be increased, and the supply of high grade oils, both above and below ground, is steadily diminishing, the stocks in possession of the pipe lines having been drawn upon during January to the amount of 319,000 barrels, while the results of drilling operations have for some time shewn that the day of gushers is past, and that only an occasional large well can be expected, the average production of the new wells growing smaller and smaller, while efforts to establish extensions to the productive area almost uniformly result in failures. The reports from the producing fields during the past week have been rather meagre, says the *Oil, Paint and Drug Reporter*, but they shew no improvement over the weeks that have preceded, and there appears very little encouragement for operators to increase their efforts. There is a monotonous sameness in reports of completions, they shewing a succession of small pumpers, broken only by an occasional good well, while the percentage of failures to find oil does not improve. Operators claim that unless there is a material advance in prices development work will shew little, if any, increase after weather conditions become more favourable to the prosecution of outdoor operations, they stating that the business has ceased to be profitable. In the Kansas and territories fields the deliveries have fallen off, and as stocks continue to still increase at a rapid rate, the development work has become less active and probably will be restricted unless conditions for marketing the product can be materially improved. In Texas, the production is declining, but drilling is fairly active, especially in the newer fields, as also in Louisiana. Prices quoted for the Texas product shew no further change.

Refined and Products.—The demand for refined for export during the past week has been fairly active, though the engagements have not equalled those of the week preceding. The conditions in the foreign markets shew no important change, though there has been partial recovery from the depression noticeable a fortnight ago. The engagements during the past week exceed 275,000 barrels, all for shipment in bulk.

The price for barreled oil has remained steady at 7·60c. for New York loading, and at 7·55c. for Philadelphia loading. The principal foreign markets are firmer. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. 3d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export have been in light request, and sales of about 50,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in good request, and sales of over 70,000 barrels are reported. Pennsylvania crude is quoted at 7·60c. in barrels.

Crude naphtha continues steady. For export, sales of about 5,000 barrels have been reported.

CLOSING QUOTATIONS.

	Crude.	Week ended Feb. 10. 1906.	Feb. 17. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4·70	4·70
Residuum, bbls for export	.. ..	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were :—

	Week ended Feb. 17. 1905.	Feb. 17. 1906.
Tiona	1·54	1·68
Pennsylvania	1·39	1·58
North Lima	0·93	0·94
South Lima	0·88	0·89
Indiana	0·88	0·89
Canadian Oil :		
Petrolia	1·33	1·34

Refined—For Export.

	Week ended Feb. 10.	Feb. 17.
Cargo Lots for export.. per gal.	7·60	7·60
In bulk	4·70	4·70
Philadelphia loading	7·55	7·55

Refined in Cases—110 Fire Test.

	Week ending Feb. 10.	Feb. 17.
5,000 to 10,000	10·35	10·35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

	Week ended Feb. 10.	Feb. 17.
120 fire test, S.W. .. per gal...	12	12
130 fire test, S.W.	12½	12½
150 fire test, W.W.	13	13
In bulk from tanks	10	10
300 fire test	12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ending Feb. 10.	Feb. 17.
Naphtha, crude, car lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	17	17

Pennsylvania Oil Runs from Feb. 9th to Feb. 14th were:—Feb. 9th, 61,921; Feb. 10th and 11th, 110,687; Feb. 12th, 79,873; Feb. 13th, 62,432; Feb. 14th, 65,352; For the month of January, 2,223,928.

The Deliveries of Pennsylvania Oil for the same dates were:—72,346; 129,742; 99,691; 93,426; 97,843; For the month of January, 2,374,247.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended Feb. 16 and from Jan. 1, were as follows :—

	Week.	Year.	1905.
Refined, barrels and bulk	296,000	1,598,800	1,067,600
Refined, cases	—	1,836,000	4,099,000
Crude, barrels and bulk	73,000	308,200	154,600
Crude, cases	—	25,000	30,000
Naphtha, barrels	—	57,600	94,000
Residuum, barrels	—	104,100	127,600
Lubricating, barrels	500	53,900	16,800
Total, barrels cde. eq.	529,998	3,522,850	3,367,793

Clearances for the Week.

During the week ended Feb. 16th, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows :—

	Week.	Year.	1905.
Refined	7,937,180	58,872,360	55,489,919
Crude	500	8,200	114,489
Naphtha	188,500	1,261,650	1,885,980
Residuum	—	—	1,844,915

Export Statistics.

The total exports from the port of New York and from the United States have been :—

	Gallons.
From New York, week ended Feb. 16th	10,586,740
Total from New York, from Jan. 1, 1906	78,511,346
Same period last year	74,101,048
Increase	4,410,298
From United States, week ended Feb. 16th	24,271,752
Total from United States, since Jan. 1, 1906	152,552,113
Same period last year	120,352,856
Increase	32,199,257

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The "Review" Shipping List.

MARCH 1, 1906.

Specially Prepared for this Journal.

NOTE.—Except when otherwise stated the Vessels are Steamers.

*(The following abbreviations are used in this table :—*L. Left ; P. Passed ; Arr. Arrived ; Sp. Spoken ; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Sables d'Olonne	Philadelphia	Arr. Feb. 22
ALCHYMIST	London	Shoreham	L. Feb. 27
AMERICAN	New York	Antwerp	Arr. Feb. 25
APPALACHEE	SanFrancisco	Shanghai	At Honolulu, Feb. 17
APSCHERON	Genoa	Venice	L. Feb. 20
ARAL	Philadelphia	Hamburg	Arr. Feb. 26
ARAS	Batoum	London	Off I. of W., Feb. 1
ARGYLL	Port Harford	Honololu	Arr. Feb. 14
ASTRAKHAN	Tyne	Philadelphia	Arr. Feb. 14
AUGUST KORFF	Philadelphia	Nordenham	P. Dungeness, Feb. 26
AUREOLE	London	Tyne	Arr. Feb. 17
AZOV	Coleta Buena	Callao	Arr. Nov. 16
BAKU STANDARD	Kustendje	Rouen	Arr. Feb. 26
BALAKANI	Port Arthur (Texas)	Manchester	Arr. Feb. 19
BATOUM	Tyne	Port Arthur (Texas)	P. Dunnet Head, Feb. 17
BAYONNE	New York	Tunis	L. Feb. 14
BEACON LIGHT	Lisbon	Penarth	Arr. Feb. 14
BEME	Bombay	Rangoon	L. Feb. 2
BLOOMFIELD	New York	Flushing	L. Feb. 17
BORJOM	Alexandria	Batoum	Arr. Const'ple, Feb. 20
BRILLIANT	New York	Hamburg	Arr. Feb. 22
BROADMAYNE	Manchester	Kustendje	Arr. Feb. 21
BULLMOUTH	Shanghai	—	L. Feb. 25
BULYSSES	Kustendje	Dover	P. Sagres, Feb. 25
BURGERMEISTER PETERSEN	Philadelphia	Swinemunde	P. Del. Break., Feb. 25
CADAGUA	—	—	In port, Bilbao, Feb. 21
CALCUTTA (Br. bq.)	Newcastle (N.S.W)	SanFrancisco	Arr. Feb. 17
CARDIUM	Singapore	—	L. Jan. 23
CAUCASIAN	Philadelphia	London	Arr. Feb. 19
CHARLOIS	New York	Rotterdam	Arr. Feb. 27
CHESAPEAKE	New York	Flushing	L. Feb. 15
CHESTER	Antwerp	New York	Off I. of W., Feb. 16
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Singapore	BalekPappan	Arr. Feb. 26
COL. E. L. DRAKE	New York	Galveston	L. Oct. 25
COWRIE	Cardiff	Singapore	L. Suez, Feb. 11
CYMBELINE	Penarth	Constant'ple	L. Feb. 23
CZAR NICOLAI II.	Hamburg	Batoum	Off I. of W., Feb. 12
DAGHESTAN	St. Louis (Rhone)	Batoum	L. Const'iple, Feb. 23
DAKOTAH	Hong Kong	SanFrancisco	Arr. Feb. 22
DELAWARE	Belfast	Philadelphia	P. Tory Island, Feb. 18
DEUTSCHLAND	New York	Rotterdam	Arr. Feb. 26
DIAMANT	New York	Swinemunde	L. Feb. 22
ELAX	Singapore	—	L. Feb. 16
ELISE MARIE	New York	Stettin	Arr. Feb. 24
ENERGIE	Tyne	New York	L. Feb. 9
ERIVAN	Port Arthur (Texas)	Antwerp	L. Newport News, Feb. 19
EUPLECTELA	Hamburg	Philadelphia	Off I. of. W., Feb. 20
EXCELSIOR	New York	Hamburg	Arr. Feb. 21
EZIO	—	—	Coasting Peru
FRANCE MARIE	Barcelona	Philadelphia	Arr. Feb. 22
GEESTEMUNDE	Tyne	Philadelphia	P. Butt of Lewis, Feb. 23
GENESSE	Manchester	Philadelphia	L. Liverpool, Feb. 17
GEORGIAN PRINCE	Tyne	Havana	Arr. Feb. 21
GOLDMOUTH	Hamburg	Cardiff	Arr. Feb. 27
GRAF STROGANOF	Cronstadt	Odessa	In Tyne, Jan. 10
GUT HEIL	New York	Havana	L. Feb. 14
HAINAUT (Dch. shp.)	Smyrna	Antwerp	Arr. Feb. 23
HARRY WADSWORTH	Port Arthur (Texas)	Birkenhead	L. Newport News, Feb. 18
HELIOS	Trieste	Constanti'ple	L. Fiume, Feb. 20
HOTHAM NEWTON	Philadelphia	Flushing	L. Feb. 19
HOUSATONIC	Newcastle (N.S.W.)	SanFrancisco	L. Jan. 31
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Naples	Taganrog	L. Feb. 23
J. B. AUG. KESSLER	Port Arthur (Texas)	Dover	L. Feb. 9
JAMES BRAND	Port Arthur (Texas)	Dover	L. Feb. 14
KURA	Penarth	Philadelphia	Arr. Feb. 28
LA CAMPINE	New York	Antwerp	Arr. Feb. 25
LA FLANDRE	Ghent	Philadelphia	P. Lizard, Feb. 13
LA HESBAYE	Antwerp	Batoum	L. Feb. 23
LA MADALEINE	Antwerp	Marseilles	L. Feb. 23
LA VIGUESA	Marcus Hook	Vigo	Arr. Nov. 6
LACKAWANNA	London	Philadelphia	L. Feb. 14
LE COQ	Port de Bouc	Philadelphia	Arr. Feb. 23
LOUTSCH	Barcelona	Novorossisk	L. Barcelona, Feb. 25
LUCERNA	Philadelphia	Tyne	Arr. Feb. 26
LUCIFER	Newport	New York	Arr. Feb. 21
LUCIGEN	Rotterdam	Tyne	Arr. Feb. 23
LUCILINE	Marcus Hook	Dunkirk	Arr. Feb. 25
LUMEN	Bergen	Tyne	Arr. Jan. 12
LUX	Rouen	Novorossisk	P. Tarifa, Feb. 17
MAKKAVEI	Batoum	Odessa	L. Feb. 6
MANHATTAN	New York	Rotterdam	L. Feb. 22
MANNHEIM	Rotterdam	New York	P. Prawle Pt., Feb. 26
MARGARETHA	London & Newport	Manzanilla	Off Barry Island, Feb. 1
MEXICAN PRINCE	Tyne	Cienfuegos	Arr. Feb. 4
MIRA	Rouen	Newport	Arr. Feb. 22
MUREX	Palembang	—	L. Feb. 20
NARRAGANSETT	Tyne	New York	P. Dunnet Head, Feb. 22
NERITE	BalekPappan	—	L. Feb. 22
NEW YORK	Southampton	New York	E. of Nantucket, Feb. 24
OCEAN	Hamburg	Philadelphia	L. Tyne, Feb. 27
ORANJE PRINCE	Tyne	Cuba	At Manzanillo, Feb. 20
ORIFLAMME	Rouen	Philadelphia	P. Lizard, Feb. 17
OSCEOLA	Norfolk	Bluefields	P. Cape Henry, Jan. 16
OTTAWA	Marcus Hook	Vera Cruz	L. Galveston, Feb. 19
OURAL	Port Arthur (Texas)	Rouen	P. Lizard, Feb. 26
PALEMBANG	Bangkok	Palembang	L. Jan. 10
PAULA	Tyne	New York	P. Dunnet Hd., Feb. 27
PECTAN	Port Arthur (Texas)	Thameshaven	Arr. Feb. 28
PENNOIL	Philadelphia	Rotterdam	Arr. Jan. 20
PERLAK	Hong Kong	Palembang	L. Jan. 20
PETROLEUM	—	Gibraltar	Arr. Dec. 18
PHOEBUS	Hamburg	New York	Off I. of W. Feb. 20
PINNA	Philadelphia	Manchester	Arr. Feb. 25
POTOMAC	Avonmouth	New York	P. Fastnet, Feb. 18
PROMETHEUS	Rotterdam	New York	Arr. Feb. 26
PRUDENTIA	Port Talbot	Kustendje	P. Lundy Is., Feb. 27
RION	Tyne	Port Arthur (Texas)	P. Prawle Pt., Feb. 10

Vessel.	From.	For.	Latest Date and Position.
ROCK LIGHT	Port Arthur (Texas)	Manchester	Arr. Feb. 26
ROSSIJA	Hamburg ..	Novorossisk	P. Constanti'ple, Feb. 24
ROTTERDAM	Rotterdam ..	New York ..	Arr. Feb. 27
RUSSIAN PRINCE	New York ..	Havana	Arr. Feb. 12
SALAHADJI	Singapore ..	Sanga Sanga	L. Jan. 21
SEMINOLE	Philadelphia	Calcutta	Arr. Feb. 7
SILVERLIP	Tyne	Port Arthur (Texas)	L. Feb. 24
SINGU	Bombay	Rangoon ..	L. Jan. 26
SNOWFLAKE	Philadelphia	Hull........	P. Scilly, Feb. 28
SOPHIE	Venice	Messina	L. Feb. 6
SPONDILUS	Cardiff......	Singapore ..	L. Suez, Feb. 19
STANDARD	Sandy Fjord & Copenhagen	Bangkok	Sp. previous to Feb. 17 near Ris Gharib
STROMBUS	Singapore ..	—	L. Jan. 14
SURAM	Newport	Batoum	L. Feb. 22
SUWANEE	Barrow	New York ..	Arr. Feb. 8
SVIET	Alexandria ..	Odessa	Arr. Feb 16
TELENA	Singapore ..	—	L. Feb. 13
TEREK............	Manchester	Philadelphia	Arr. Feb. 24
TIFLIS............	Philadelphia	Cette	P. Del. Break., Feb. 16
TIOGA	Batoum	Liverpool ..	Arr. Nov. 25
TONAWANDA	New York ..	Kurrachee ..	At Port Said, Feb. 26
TROCAS	Taketoyo ..	Singapore ..	Arr. Feb. 22
TURBO	Port Arthur (Texas)	Thameshaven	Arr. Feb. 26
TUSCARORA......	Calcutta	New York ..	Arr. Feb. 2
TWINGONE	Madras	Rangoon....	L. Jan. 28
VEDRA	Philadelphia	Flushing....	Arr. Del. Break., Feb. 17
VILLE DE DIEPPE	Philadelphia	Rouen......	P Del. Break, Feb. 4
VILLE DE DOUAI	Calais......	Dunkirk ..	Arr. about Feb. 1
VOLUTE	Kobe	Yokohama ..	Arr. Feb. 24
WEEHAWKEN	London	Sumatra	L. Colombo, Feb. 1
WILLKOMMEN ..	New York ..	Swinemunde	P. Butt of Lewis, Feb. 27
WINNEBAGO (Late Kinsman)	Bombay	San Francisco	L. Feb. 6

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

March 2nd, 1906.

The price of petroleum is unchanged as follows:—

Russian 5⅞d.; American, 6⅛d.; Water White, 7⅝d.; and Roumanian, 5⅞d.

LUBRICATING OILS

remain the same as last week, latest quotations being:—

American pale, £7 5s. to £8 15s.

American dark cylinder, from £7 10s.

American filtered cylinder, from £10 12s. 6d.

TURPENTINE.

American turpentine has weakened since our last report, and is now quoted for Spot and to the end of May, 47s., and lower quotations for the end of this year.

LIVERPOOL OIL MARKET.

March 1st.

Refined oils are quiet, but sellers now quote 6½d. for Russian and 6⅝d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, March 1st.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, March 1st.

Standard White is quoted at 7·55.

RUSSIA.

Baku, February 27th.

The petroleum market is undefined. Light crude is now quoted, spot, 25½-25¾ copecs; residuals, 27 copecs.

BELGIUM.

Antwerp, February 24th.

The petroleum market is unchanged. Price of Standard White, spot, 19½ francs per 100 kilos; March, 19¾ francs; April-May, 20 francs.

GERMANY.

Hamburg, February 24th.

The kerosene market is weak. The price of American Standard White is 7·10 marks per 50 kilos.

ROUMANIA.

February 24th.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs. ...	3·35-3·40
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery ...	3·00- —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural...	20-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octro tax of 12 fcs. per 100 kilos

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
„ sp. gr. 0·720-0·725	8·00- 9·00
„ sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

Bombay, February 10th.

There has been no change in prices of Burma oils since our last report, but the tendency is firmer.

American, "Snowflake," 150 deg.	Rs.	6	0	2
„ Chester, 125 deg.		4	8	2
„ Monkey Brand, 125 deg.		4	2	2
Russian, "Anchor," 125 deg.		4	14	6
„ "White Camelia" brand, 125 deg. ..		4	0	2
„ "Rising Sun," bulk, in local made tins ..		3	14	0
„ "Elephant" brand, in local made tins ..		3	10	0
„ Bulk, in Bombay Bazaar, 125 deg. per 10 gallons..		3	3	0
Borneo oil in bulk		2	14	6
Burma Oil, in bulk, per 8 imperial gallons		2	11	0

YOUNG LADY, Shorthand Writer and Typist, highly recommended and thoroughly conversant with the Oil Business, is open for Engagement. Write in first instance to "S.," Petroleum Review Office, 45, St. Mary Axe, E.C.

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IMPORTS of PETROLEUM into UNITED KINGDOM

FOR THE WEEK ENDED FEBRUARY 27th, 1906.

Specially prepared for this Journal by . . . the Custom House.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Feb. 21	London	H. Finkler and Co.	Douro	100 brls.	Lub.	4,000	Trieste
,, 21	,,	G. L. Woodcock	,,	564 brls.	,,	22,560	,,
,, 21	,,	London and India Dock Co.	Minneapolis	80 brls.	,,	3,200	New York
,, 21	,,	T. S. Harris and Co.	Eagle Point	100 brls.	,,	4,000	Philadelphia
,, 22	,,	Mordaunt Bros.	,,	320 brls.	,,	12,800	,,
,, 22	,,	Grindley and Co.	Mackinaw	300 brls.	,,	12,000	,,
,, 22	,,	Shell Transport Co.	Turbo	Bulk	Fuel	1,112,400	Port Arthur
,, 22	,,	Consolidated Petroleum Co.	Aras	Bulk	Lamp	509,000	Batoum
,, 22	,,	,,	,,	Bulk	Gas	758,500	,,
,, 23	,,	R. Park and Co.	Medoc	54 brls.	Lub.	790	Marseilles
,, 26	,,	G. W. Sheldon and Co.	Ptarmigan	37 brls.	,,	1,540	Antwerp
,, 27	,,	Gas Light and Improvement Co	Zephyr	600 steel brls.	Pet. Spirit	30,000	Rotterdam
,, 27	,,	Joseph Barber and Co.	Nerissa	122 pks.	Lub. Gr.	1,500	Hamburg
,, 27	,,	G. W. Sheldon and Co.	America	109 pks.	,,	1,680	New York
,, 27	,,	Shell Transport Co.	Pectan	Bulk	Fuel	2,367,600	Port Arthur
,, 27	,,	Anglo-American Oil Co	Eagle Point	500 brls.	Min. Colz.	20,000	Philadelphia
,, 27	,,	,,	,,	1150 brls.	Lub.	46,000	,,
,, 21	Liverpool	Meade-King, Robinson and Co.	Iceland	7 brls.	,,	280	Hamburg
,, 21	,,	,,	Derwent	973 steel brls.	M. Spirit	48,970	Rotterdam
,, 22	,,	Cunard Steam Shipping Co.	Pannonia	180 brls	Lub.	7,200	New York
,, 26	,,	Liverpool Storage Co.	Armenian	250 brls.	,,	10,000	,,
,, 26	,,	Vacuum Oil Co.	,,	199 brls. 60 ½-brls.	,,	9,160	,,
,, 26	,,	Meade-King, Robinson and Co.	Templemore	120 brls	,,	4,800	Baltimore
,, 26	,,	W. Gibson and Sons	Cestrian	50 brls.	Lamp	2,050	Boston
,, 27	,,	G. B. Taylor	Armenian	2585 brls.	Lub.	103,400	New York
,, 27	,,	W. B. Dick and Co.	,,	100 brls.	,,	4,110	,,
,, 22	Bristol	W. G. Clarke	Juno	6 brls.	,,	270	Antwerp
,, 22	,,	,,	,,	18 brls	Min. Colz.	720	,,
,, 22	,,	H. R. James and Son	Wells City	196 brls	Lub.	7,840	New York
,, 22	,,	Ford and Canning	,,	60 brls.	,,	2,400	,,
,, 22	,,	W. Smith and Co.	,,	75 brls.	,,	3,000	,,
,, 23	,,	Anglo-Bhosphorus Oil Co	City of Frankfort	116 brls.	,,	4,730	Hamburg
,, 23	,,	Pickford's Ltd.	,, ,,	46 pks.	,,	770	,,
,, 26	,,	W. Smith and Co.	Brooklyn City	1220 brls.	,,	48,800	New York
,, 23	Grimsby	J. Sutcliffe and Sons	Chester	23 brls.	,,	920	Hamburg
,, 21	Hull	Consolidated Petroleum Co.	Rion	Bulk	Lamp	543,030	Novorossisk
,, 22	,,	Helmsing & Sons	Vasco	384 brls.	Lub	15,360	Riga
,, 22	,,	W. Gillyott and Co.	Consuelo	2739 brls.	,,	109,560	New York
,, 22	,,	T. Wilson, Sons and Co.	Sultan	8 brls.	,,	320	Antwerp
,, 22	,,	,,	Consuelo	436 brls.	,,	17,440	New York
,, 24	,,	,,	Vasco	16 brls.	,,	640	Riga
,, 22	Manchester	Consolidated Petroleum Co.	Balakani	Bulk	Lamp	850,000	Port Arthur
,, 22	,,	,,	,,	Bulk	Gas	390,000	,,
,, 22	,,	G. B. Taylor	Man. Commerce	3427 brls.	Lub.	137,080	Philadelphia
,, 22	,,	Meade-King, Robinson and Co.	,, ,,	300 brls.	,,	12,000	,,
,, 22	,,	,,	,, ,,	990 pks.	,,	40,620	,,
,, 22	,,	Crew, Levick Co.	,, ,,	220 brls.	,,	9,920	,,
,, 22	,,	W. Hodgson and Co.	Holnis	250 brls.	,,	10,800	Hamburg
,, 22	,,	,,	,,	70 brls.	,,	3,000	,,
,, 26	Middlesbrough	Donald Currie and Co.	Consul Poppé	50 brls.	,,	2,000	Antwerp

MIDLAND RY-CARRIAGE & WAGON CO., LTD.

Midland Works,
BIRMINGHAM.
BUILDERS OF
OIL & OTHER
TANK WAGONS,
And Every Description
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WITH WOOD OR STEEL
UNDERFRAMES

Anglo-American Oil Co., Ltd.,

SOLE IMPORTERS

Finest American Lamp Oils

WHITE ROSE

. . and . .

ROYAL DAYLIGHT.

Pratt's Motor Spirit

PACKED IN SEALED TWO GALLON CANS

Universally used by all leading Motor Manufacturers, Motorists, Railway and Motor Bus Companies.

IN USE AND FOR SALE EVERYWHERE.

QUALITY TELLS.

To Dealers only.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Feb. 24	Plymouth ..	Harris and Co.	City of Liverpool	24 pks.	Lub. ..	320	Hamburg
,, 20	Glasgow ..	Nicholson and Co.	Siberian	20 brls.	,, ..	1,010	Boston
,, 22	Grangemouth	J. and A. Allan	Coburg	25 brls.	,, ..	1,000	Hamburg
,, 23	,, ..	J. Currie and Co.	Scalpa	25 brls.	,, ..	1,000	,,
,, 23	,, ..	,, ...	,, ...	100 brls	Lamp ..	4,000	,,
,, 22	Leith ..	W. G. Yooll and Co.	Weimar	100 brls.	,, ..	4,360	,,
,, 22	,, ..	,, ...	,, ...	10 brls.	Lub ..	400	,,
,, 26	,, ..	J. Currie and Co.	Breslau	50 brls.	Lamp ..	2,050	,,
,, 22	Belfast ..	Graham-Yooll and Co.	Tellin Head ..	50 brls.	Lub. ..	2,000	Riga
,, 24	Dublin ..	G. Heyn and Sons	City of Oporto ..	12 brls.	,, ..	500	Antwerp
					Net Total	7,325,400	
		Deduct—					
Jan. 6	London ..	Consolidated Petroleum Co. ..	Elise Marie ..	Bulk ..	Gas	860,000	Philadelphia

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO FEBRUARY 27th 1906.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.
Austria ...	—	868,230	26,560	183,740	—	11,000	—	—	—	—	—	—	—	--	26,560	1,073,970
Belgium ...	—	240	4,630	88,180	—	11,000	—	—	—	1,620	—	—	720	1,416	5,350	91,456
Borneo ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Canada ...	—	—	—	8,000	—	20,000	—	—	—	—	—	—	—	—	—	28,000
Germany ...	10,410	703,850	24,720	339,240	—	—	—	—	—	2,320	—	—	—	4,980	35,132	1,060,390
Holland ...	—	—	—	160	—	—	—	—	78,970	852,570	—	98,200	—	7,080	78,970	958,010
Roumania ...	—	1,360,000	—	—	—	—	—	—	—	—	—	—	—	—	—	1,360,000
Russia ...	1,052,670	7,250,590	17,360	21,000	—	—	758,500	758,500	—	—	—	—	—	5,410	1,828,530	8,035,500
Sumatra, &c	—	—	—	—	—	—	—	—	—	930,000	—	—	—	—	—	930,000
U.S.A. ...	852,050	11,438,527	608,020	7,946,454	—	523,328	390,000	8,746,340	—	1,069,180	3,480,000	3,480,000	20,020	238,890	5,350,070	33,432,629
Other Countries	—	—	790	4,820	—	—	—	—	—	480	—	—	—	90,800	790	96,100
	1,915,130	21,621,437	682,080	8,591,594	—	565,238	1,148,500	9,504,840	78,970	2,856,170	3,480,000	3,578,200	20,720	348,576	7,325,400	47,066,055

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Spies Petroleum Co., Ltd.—The output for the week ended February 18th was 126,840 poods, or 2,045 tons.

Baku Russian Petroleum Co., Ltd.—The production for the week ended February 24th was 294,000 poods, or 4,742 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended February 25th was 269,000 poods, or 4,338 tons,

The European Petroleum Co., Ltd.—The production for the week ended February 25th, 1906, was 82,156 poods, or 1,324 tons.

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 1st March, 1906, as follows:—

Although, generally speaking, the works have a fair amount of work in hand, the position of the market is very unsatisfactory, as makers state that the prices at present obtainable do not cover cost, and unless matters improve they will have to close down their mills when orders on hand have been worked off. Prices remain at about the same level as last week, viz.:—

IC	18¾ × 14	124 sheets	110 lbs.	13/- per box.
IC	19¼ × 14	120 ,,	110 ,,	13/- ,,
IC	20 × 10	225 ,,	156 ,,	18/6 ,,

F.o.b. Wales. Tin lining and iron hooping extra.

Telegraphic Address:—"OLEINE." Telephone Nos.:—{ 249 & 254 LIVERPOOL. 1990 MANCHESTER.

MEADE-KING, ROBINSON & Co.,

11, Old Hall Street, LIVERPOOL, & 8, Exchange Street, MANCHESTER,

IMPORTERS AND DISTRIBUTORS OF

PETROLEUM PRODUCTS THROUGHOUT NORTHERN AND MIDLAND DISTRICTS OF ENGLAND.

SPECIALITIES: All Grades of

GAS OILS, MINERAL LUBRICATING OILS, PARAFFIN SCALE AND WAX, PETROLEUM SPIRIT, BENZOLINE AND BENZINE, SWANSDOWN WATER WHITE AMERICAN PETROLEUM.

The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XIV. *(New Series.)* March 10th, 1906. No. 366.

Editorial Notes.

The Burma Monopoly Broken. The news which we publish elsewhere to the effect that the Burma Government is now willing to grant fresh licenses to prospect for petroleum in the Yenangyaung oil field possesses a peculiar interest. For the past two years, a steady yet continuous agitation has been proceeding from two distinct quarters—the Standard Oil Co. and the Shell Transport and Trading Co.—in order that both concerns might obtain redress, either by the abolition of the duty in India, or through being granted facilities for exploration in Burma equivalent to those given to the Burma Oil Co. On behalf of the former company, Mr. Libby energetically pushed the matter forward, while for the "Shell" Sir Marcus Samuel carried on a most spirited attack. Sir Marcus does not do things by halves. In this case he has never missed an opportunity to urge the claims of the principle of a fair field and no favour, and has even gone so far as to convene meetings in the Committee rooms of the House of Commons, so that members of Parliament might become acquainted with the actual facts. Now, however, agitation has secured its reward, and though at present it is impossible to deal with the subject fully, we are in a position to state that the principle for which the fight commenced has now been gained.

The Ferghana Oil Strike. The strike among the workmen which broke out quite recently at the Ferghana oil field is happily settled, and work has again assumed its normal course. From the details which have reached us, it appears that it arose as a result of an ill-feeling among the employés which was engendered by a number of oil field workmen who arrived at the Ferghana district from Baku. The new arrivals were of the discontented class, in fact, they had taken part in the strikes and agitations in the Baku fields previously, and in a very short time they made things somewhat unpleasant for the workmen of different nationalities, who had for many months been engaged upon oil field work at Chimion. Complaints of an economic nature were made to the management, and, though some of these were complied with, discontent still prevailed, which eventually led to a general strike. The undesirable workmen from Baku, however, were arrested, and without delay work was restarted. Happily the action of the sub-governor in the matter greatly assisted to bring about pleasant relations between employers and employed, and one strike, at all events, which might have been of serious consequences was "nipped in the bud."

The Russian Oil Market. From the latest information which reaches us concerning the Russian oil market, the trend of events is reassuring. At the oil fields work is rapidly regaining its normal basis, and the pipe line is again receiving oil. The battle, however, between buyers and sellers still continues. The latter are quoting very high prices in view of the scarcity which must be felt for a long time yet, while buyers are endeavouring to hold out a little longer in the hope that prices will moderate. They calculate that the output of crude oil is bound to increase, and so cover all the requirements of the market. Judging, however, by the stocks at Baku this expectation does not appear to rest upon any firm foundation, for three weeks ago the whole stocks of crude and residuals at the Baku refineries did not exceed 50,000,000 poods—a figure quite inadequate to meet the demands of the trade. On the Baku market interest is mainly centering round residuals, and, under pressure of necessity, buyers have to conclude deals at high prices.

Roumanian Refineries in 1905. The substantial increase which we recorded in the production of crude oil in the Roumanian oil fields is reflected in the statistics which we now publish of the operations of the refineries for the past twelve months. The figures in themselves convey a fairly good idea of the output for the year, but we are sorry that there is such a vast difference between the classification of the products from the point of view of the refining and the exporting trade. So great is this difference that when one looks at the stocks, the home consumption and the export on the one hand, and compares the figures shewn in the statistics of the output of the refineries, some thousands of tons of very valuable products appear to be totally unaccounted for. As an instance, we can take the case of Roumanian benzine, the output of which amounted last year to over 78,000 tons. During the year stocks varied only very slightly, and therefore these can be dismissed from the subject. The consumption of benzine in Roumania we know is very small—only a few hundred tons—and therefore the bulk has to find an export market. During recent years Germany and France have taken fairly considerable quantities, last year the total export of benzine from Roumania being 46,000 tons. The question then arises, what has become of the remaining 30,000 tons? It has not been exported, it has not been consumed at home, and it is not to be found in the stocks, although it certainly has been delivered from the refineries. Here is a conundrum worthy of pondering over.

The Benzine Trade of Roumania. We have often referred in these columns to the fact that the Roumanian petroleum industry is as yet in its infancy. But it is making progress, and that progress is considerable. Its petroleum is particularly rich in bye-products, and, though the refiners are still unable to make the most of the valuable crude material, it is plain that in regard to the production of benzine, Roumania is not to remain long in the background. The one great essential asset is an organisation which is capable of marketing the products upon a proper basis, and it is no reflection upon Roumania's industry when we state that at present that organisation is not in existence. When once such an organisation is created, then there will be an end to the waste of valuable products which must necessarily now be an every day occurrence in Roumania, and from that day henceforth the country, endowed as it is with vast mineral resources, especially from the point of view of the petroleum industry, will most assuredly make remarkable progress and be a factor to be reckoned with among the producing countries of the world.

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LATEST FROM THE GALICIAN OIL FIELDS.

The Galizische Karpathen A.G. has had a rather remarkable strike in its well No. 16 at Tustanowice. At a depth of only 230 metres they obtained a powerful eruption of gases and oil. The oil is light and thin, and of a greenish colour. This well is situated in the vicinity of the Litwa and Triumph wells, and the remarkable fact is that in none of the neighbouring wells has such an oil been found.

The Galizische Naphtageseleschaft has obtained oil in their first bore hole to the extent of 20 tons daily; the well is 780 metres deep. On the outskirts of Tustanowice towards Pouerle, well No. 1 of Messrs. Goldstein and Co. has had powerful gas eruptions; their well No. 2 has also become productive, the two wells together yielding 20 to 30 tons of crude oil per day.

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OPERATIONS OF THE ROUMANIAN REFINERIES IN 1905.

The *Moniteur du Petrole Roumain* publishes the following statistics dealing with the operations of the Roumanian refineries in 1905, as compared with the preceding year.

The total production of crude oil in Roumania in 1905 amounted to 614,870 tons, out of which 510,143 tons, or about 83 per cent. were delivered to the refineries. In 1904 the total production of crude oil amounted to 500,561 tons, and the quantity delivered to the refineries 391,387 tons, or about 77 per cent.

The output of various products by the refineries in in 1905, compared to 1904, was as under:—

	1905. Tons.	1904. Tons.
Benzine	78,182	62,218
Illuminating Oil	153,499	109,510
Lubricating Oils	17,255	30,214
Residuals	237,677	173,661
Total	486,613	375,603

The consumption of petroloum products in Roumania in 1905, compared to 1904, was:—

	1905. Tons.	1904. Tons.
Benzine	615	489
Illuminating Oil	31,558	32,440
Lubricating Oils	4,921	3,418
Residuals	162,243	119,735
Total	199,337	156.082

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PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Spies Petroleum Co., Ltd.—The output for the week ended March 4th was 123,600 poods, or 1,993 tons.

Baku Russian Petroleum Co., Ltd.—The production for the week ended March 3rd was 295,000 poods, or 4,758 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended March 4th was 286,000 poods, or 4,612 tons.

The European Petroleum Co., Ltd.—The production for the week ended March 4th, 1906, was 91,297 poods, or 1,472 tons.

THE OPERATIONS OF THE BAKU REFINERIES.

STATISTICS FOR JULY AND AUGUST, 1905 (in poods).

I.—Manufacture of Illuminating Oils.

Distillation.

	Submitted to Distillation.			Products Received.				
	Crude.	Other Products.	Total.	Kerosene.	Residuals.	Other Products.	Loss.	Fuel used.
July	35,488,981	300,229	35,879,209	6,543,281	26,799,502	1,592,800	943,626	1,278,288
August	26,389,186	277,709	26,666,895	4,083,716	20,403,734	1,423,476	755,969	942,774

Refining

	Submitted to Refining.			Refined Products Obtained.			Chemicals used.	
	Kerosene.	Other Distillates.	Total.	Kerosene.	Other Products.	Loss in Refining.	Acid.	Soda.
July	5,470,363	8,899	5,479,262	5,313,287	7,061	158,914	25,047	9,423
August	4,218,553	15,279	4,233,232	4,116,817	13,548	103,365	20,075	7,433

II.—Manufacture of Lubricating Oils.

Distillates Received.

	Machine Oil.	Spindle Oil.	Cylinder Oil.	Goudron.	Solar Distillates.	Residuals.	Other Distillates.	Loss in Distilling.	Fuel used.
July	1,843.371	106,148	59,000	797,778	1,518,217	1,064,827	7,480	325,080	628,096
August	841,288	106,676	49.545	439,075	1,383,044	1,110,128	18,943	185,296	514,851

Refined Products Received.

					Chemicals used.	
	Spindle Oil.	Machine Oil.	Cylinder Oil.	Loss in Refining.	Acid.	Soda.
July	108,533	1,089,106	42,671	127,097	48,123	6,690
August	108,122	877,580	42,531	104,725	40,870	5,586

The output of benzine-distillates in August amounted to 101,814 poods against 103,621 poods in July; that of refined benzine amounted to 42,277 poods in August against 36,333 poods in July.

The output of solar distillates from the kerosene and lubricating oil refineriesamounted, in August, to 1,488,795 poods, against 1,735,333 poods in July.

The Closing of the Batoum Case Oil Works.

The closing of the Batoum case oil works, the causes which have brought it about, and its effects on the town of Batoum and the petroleum industry, form the subject of a long series of most interesting articles by Mr. M. S. Betanoff in the *Tchernomorski Viestnik*, published at Batoum.

The closing of the case oil works at Batoum has brought about a crisis which threatens to ruin the town in its position as an industrial centre and petroleum export port. The first result has been that 10,000 men were thrown out of employment, the vast majority being faced with starvation. The life of Batoum practically centred in the case oil works. When these were closed and the ships which carried their products ceased to come, a period of hopeless stagnation set in which is daily growing worse. And it was not only Batoum that suffers. The effects of the crisis are keenly felt throughout the whole of the western part of Transcaucasia and even the neighbouring provinces of Turkey, who with the decline of Batoum have lost their best market for the produce of their land and labour.

The industrial importance of the case oil works is shewn in the enormous quantities and variety of the materials which they used to consume. Thus the value of the different materials used by the Mantascheff works alone in 1903 were:—

		Value. Roubles.
Tinplates for manufacturing tins—		
Wide	138,900 cases	1,439,400
Narrow	37,000 ,,	
Boards for making cases .	50,000 cub. metres	990,000
Nails	12,600 cases	27,700
Lead	12,000 poods	31,000
Tin	8,900 ,,	176,000
Zinc Wire	8,200 ,,	18,000
Acid	2,300 ,,	2,700
Zinc	600 ,,	2,800
Copper	130 ,,	2,600
Rags	900 ,,	1,400
Kerosene from Baku ..	7,400,000 ,,	2,072,400
Total		4,764,400

In order to get at the causes of the crisis at Batoum, Mr. Betanoff tells at great length the history of the origin and development of the case oil trade.

The first large cargo of case oil shipped from Batoum was on the steamer "Rimpha," which came in 1886 to Batoum to load a cargo of 70,000 cases bought by an English firm from the Caspian and Black Sea Society, and which was to be shipped to Bombay. The charter party for this steamer contained one clause which has become permanent in Batoum, and was most disastrous in its consequences, and that is the provision that rainy days shall not count in the time allowed for loading. Batoum is known as one of the rainiest spots on earth, and the rainy days added to Sundays and holidays, which likewise do not count, reduced the number of working days in the year by half, and reduced the volume of the trade of Batoum by a third of what it might have been. This clause was rendered necessary by the fact that if the cases were loaded in a rain, the water could penetrate to the tins, causing them to rust and leak, but this could have been obviated by providing sheltered wharves, the cost of which would have been amply repaid by greatly increased volume of trade, which would have brought more revenue to the Treasury, more profits to the exporters, greater prosperity to the town of Batoum, and, what is most important, continuous and steady employment to the workmen.

The loading of the "Rimpha" was attended with many difficulties, but in the end the vessel sailed with its full cargo. The experiment proved successful, and the oil was sold at Bombay at a good profit, and everybody at Batoum then turned their attention to the making and filling of cases. After the Caspian and Black Sea Society's success, case factories were soon established by Richner and Co., Burkhardt and Co., Mantascheff and Co., Zovianoff Bros., Mutafoff and Melkonianz, Angelidis, Khatchatarianz, Mnazakanoff, Grammatikopulo, Saiat Shah-Abazoff and others. Capital was offered liberally by foreign capitalists, whole mountains of timber for cases were shipped from Galatz, and numberless cargoes of tin plates and other materials came from England.

The case oil trade of Batoum developed with remarkable rapidity, as shewn by the following figures of the exports of kerosene in cases from 1887 to 1904 inclusive:—

	Cases.		Cases.
1887	2,528,212	1897	11,658,838
1888	5,967,134	1898	10,648,691
1889	7,825,336	1899	12,872,362
1890	9,742,556	1900	11,402,112
1891	11,678,072	1901	14,801,493
1892	12,544,886	1902	10,929,693
1893	12,483,919	1903	11,616,623
1894	8,805,856	1904	12,521,376
1895	11,120,254		
1896	10,942,254	Total ..	180,086,657

Cases contain two poods each.

This figure does not include the Rothschild case factory's output from 1884 to 1886, which was exported solely to Black Sea and Mediterranean ports, and which amounted to 1,994,996 cases, or the output in the few months during which the case factories were working in 1905.

A glance at the above figures shews that there have been very considerable fluctuation in the volume of the case exports. This is to be explained by the severe competition which the Russian exporters are encountering from America. The Americans have the advantage of a reputably superior oil and better quality timber for the cases. The Russian product has therefore had to be sold cheaper than American. Seeing that the Batoum case oil manufacturers import all their materials from abroad, the only advantage which enabled them to undersell the Americans was in cheap labour.

On the markets of the Near East, the Russian exporters quickly gained a firm foothold, and owing to their proximity were able to oust American enterprise. There can be no doubt that the development of the case oil trade was largely affected by the development of the bulk oil export trade to the East. It is difficult to imagine the extent to which the Batoum case oil manufacture would have grown if there were no tank steamers. The first tank steamer to load oil at Batoum for the East was ss. "Murex," of Messrs. Samuel and Co., in 1891. Its arrival produced great alarm at Batoum, as everybody thought that it was the beginning of the end of the Batoum case oil trade. There were attempts by the workmen to forcibly stop the loading of the steamer, which, however, failed, and the ship was allowed to load and sail.

The consequences, however, did not prove so terrible as they were imagined, and notwithstanding the continuous growth of the bulk oil exports to the Far East the case oil shipments continued to likewise increase from year to year. The explanation is to be found in the rapidly extended consumption of illuminating oil in the Far East, where India and China, if they were to consume oil in quantities at all proportionate to their population, would be able to take up the whole output of both America and Russia. There being ample scope for both products, the only thing needed was an amicable understanding for a division of markets. But for a variety of reasons, principal among which is the want of organisation and unity among the Russian exporters, no such understanding was come to, and for these same reasons it was the Russian exporters who suffered most in the unequal competition which followed. The only attempt at combined action was in 1894, when the syndicate of Baku producers and Batoum exporters was formed for the joint export of oil in bulk and cases. The syndicate was, however, not joined by all the exporting firms, and among those who remained outside were Messrs. Zovianoff Bros., who made it their special business to continuously undersell the syndicate in case oil. As a result, the last named firm were during that year continuously busy executing orders, and are said to have made very large profits. The syndicate, not having justified its existence, came to a premature end after an existence of less than two years. The one point on which the exporters were united was in their persistent petition to the Government for a reduced railway rate for carrying export oil to Batoum, which was, however, only temporarily conceded in 1895, consequent upon the serious shrinkage in exports in 1894, and in order to avert the ruin with which the trade was threatened.

The Standard Oil Co., with its perfect organisation and vast resources, took full advantage of the disorganisation among the Batoum exporters, and no sooner had the Standard reduced its prices for oil on the markets when the Batoum case factories were compelled to reduce their output or stop entirely. This uncertainty considerably undermined the position of the case manufacturers, and more particularly the well-being of the workmen, who could never be certain of employment for any length of time. The exporters were entirely dependent on the English buyers of their oil for the East, and the latter in their turn depended on the condition of the markets which were ruled by the Standard Oil Co.

The result of all this, the writer in our contemporary states, was that many case factories were compelled to close one after another, and the smaller firms disappeared. The firms who ceased operations were:—Richner and Co., Burkhardt and Co., Zovianoff Bros., Mutafoff and Melkonianz, Mnazakanoff, Grammatikopulo, Saiat Shah-Abazoff, etc. Angelidis transferred his works to Siderides. On the other hand, Mantascheff and Co. increased their output to an enormous extent, and having taken over the case factories of Mutafoff and Richner, they extended their operation on a large scale. They acquired some steamers, established their own depôts at a number of ports in the Black Sea, the Mediterranean, and even in India, Bombay, and Calcutta, where they shipped their case oil for their own account and not to the orders of English firms. There were thus only left two large case manufacturing firms—the Caspian and Black Sea Society, known by its trade name of Bnito and Mantascheff and Co. The two small factories which also remained were Khatchatarianz, working solely for Nobel Bros., who have no case factory of their own, and Siderides, who shipped cases only to certain near markets, such as Syria and Egypt, where the product has secured a permanent sale.

The proportionate participation of the firms in the case oil exports have also changed with the times Whilst at first Bnito produced half of the total output of cases, or about 6,000,000 cases, with the development of the Mantascheff case oil business, their participation declined to one-third. This is shewn in the following figures of the output of cases at the Bnito works since 1897:—

	Cases.		Cases.
1897	3,403,732	1902	2,864,960
1898	3,367,013	1903	4,040,076
1899	3,997,415	1904	4,071,926
1900	3,341,392		
1901	5,320,754	Total	30,407,268

The total output of cases during the eight years having amounted to 96,450,198 cases, the output of Bnito, if we add to it about 2,000,000 cases for the time when the works were idle in 1902 through strike, works out exactly at one-third of the total. The decline of Bnito in the case oil trade was inevitable in view of its continued adherence to the policy of selling its oil through the intermediary of English firms, and not engaging on its own account in the distribution in the East.

On the other hand, the export of kerosene in bulk by Bnito has been steadily growing, and surpassed that of all other firms. Thus in 1900, Bnito exported 15,000,000 poods of kerosene in bulk, Nobel 11,000,000 poods, and Mantascheff only 2,500,000 poods, whilst in cases Bnito and Mantascheff exported equal quantities of about 6,000,0000 poods each.

In the course of time the conditions of labour at Batoum have also undergone great changes. At the beginning the workmen employed at the case factories and wharves at Batoum were mostly Mahomedans from the neighbouring Turkish provinces. Unprogressive and used to a low standard of living these Turkish labourers were satisfied with a poor rate of pay, and submitted to any condition imposed upon them by the manufacturers.

(To be continued.)

THE FLORENCE OIL FIELD.

Very little is ordinarily heard of the Colorado oil field, because of its isolated location and a necessarily restricted business. The Florence field (says a writer in the *Oil City Derrick*) was opened nearly 20 years ago, and considerable activity prevailed for several years, but the production finally exceeded the marketing demand, and a curtailment was imperative. During recent years two companies have practically controlled the situation — the United Oil Co. and the Florence Oil Co. Both companies operate refineries, but the United Oil Co. undoubtedly is the strongest factor. The plant of the latter concern has 14 stills, considerable storage room, and buys the individual production as well as operating its own and sub-leased territory. Up to January 1st last three strings of tools were kept busy maintaining production, but at present only one rig is running. This is made necessary by the maximum stocks desired, which, with the refined oils on hand, cover market demands for 18 months ahead. For several years the expense bill was $18,000 a month, but with the installation of improved pipe line, storage, and mechanical appliances, the company has been enabled to greatly reduce the outlay and give better service in every department.

The oil-producing formation in the Florence district is unlike most oil fields, in that the oil is found in shale. The use of nitro-glycerine seems to shatter the shale and forces the oil back instead of permitting its increased flow to the surface. Drilling is not always easy and is frequently very expensive. The average gravity of the oil is 30·50°, although it is occasionally found as high as 44°. The average well will pump 20 barrels in the heart of the pool. The best well ever drilled at Florence started at 400 barrels, is 17 years old, and is doing 40 barrels a day at present. The well has produced 1,500,000 barrels of oil. The present daily production of the United Oil Co. is about 2,500 barrrls, maintained by constant drilling.

The company has shut-down its own wells and taken the individual production whenever the occasion demanded, because it was compelled to have outside production, and the individual producers must be given a show to maintain their properties. The strongest production is now obtained from territory five miles south of Florence, the frontier development being six miles south of the town. Boulder, to the north, has never been extensively developed, because the Florence plants formed the only outlet and the market had absolute limitations. Recently a test well was drilled under accurate scientific deductions and geological facts. The result was successful, but so far the company is not in a position to give out details or the exact character of the well further than to admit that it will be a producer. Probably between 600 and 700 holes have been drilled in the Florence district.

Only those who have lived in Colorado and the Rocky mountain country can appreciate the troubles that are encountered in getting raw materials and finished articles in and out. Oak lumber is shipped to Colorado from Missouri, and costs $90 a thousand feet, and as much as $600 freight has been paid per carload. A larger use for redwood and other soft lumber developed, and Oregon and Washington supplied the demand. In car lots freight rates could be made at $200 to $300 a car. It has cost as much as $600 to ship a car of refined oil from Florence to upper Montana points. Fuel oil has been sold, f.o.b. Florence, destined to Leadville, for 25 cents a barrel, to get rid of it. At other times coal has been used under the boilers of the refinery. Circumstances surely alter cases, and there is no hard and fast rule that can be applied to any business that will cover every locality.

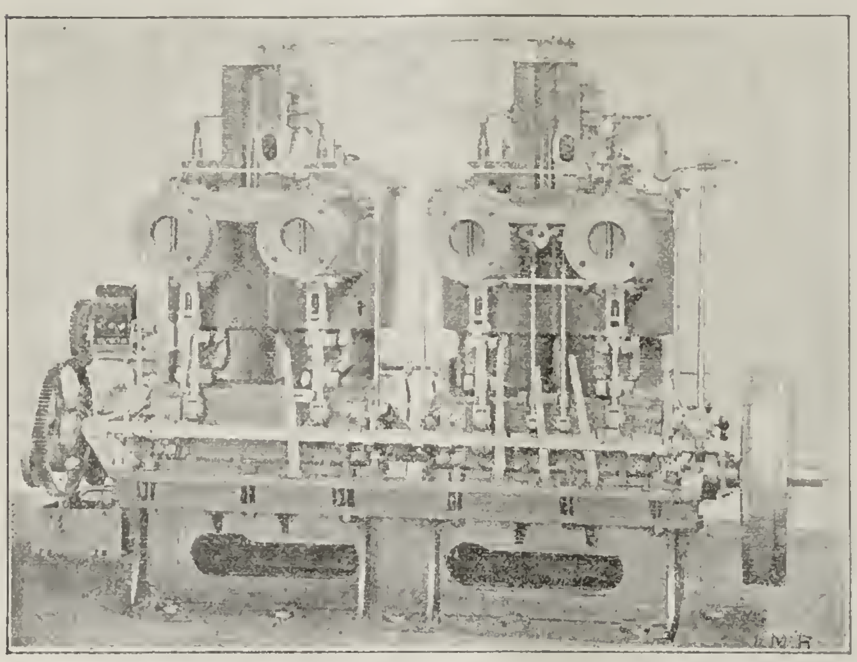
A Refinery in the Florence Field.

The Florence field, in the heart of the Rocky mountains, has limitations, but it also is enabled to supply a territory that competitors can reach only under handicaps. By the rules of "square deal" the Colorado oil is entitled to the lion's share of the trade, and in its own territory is not only getting it, but is in a position to keep it, at least for some time, because it has sized up supply and demand, first cost and distribution, and has provided itself with at least some of the needs of the self-protecting business. The Mid-Continent oil field is a menace to the Colorado field by reason of its over-production, but it has a protection, to a certain degree, in the fact that even that over-production cannot find its way into the fastnesses of the Rocky mountains in active competition with Colorado oil, without a loss to the competitors. Kansas refineries, several of them, are already trying the experiment by cutting the price of refined oil. It will soon cease to be an experiment, and the Kansas refiners will be absolutely certain that price-cutting does not pay dividends.

Concluding, the writer says that a study of oil conditions in Colorado also leads to the reflection that business in low-priced states or neighbourhoods has no advantage over business in high-priced states or neighbourhoods.

ANOTHER LARGE KEROSENE MOTOR.

The illustration which we herewith reproduce from *Motor Traction*, depicts one of the latest of the well-known Vosper motors made by Messrs. Vosper and Co., Ltd., Broad Street, Portsmouth, and which uses paraffin as its source of power. It has four cylinders, which develop 80 b.h.p., and the engine can be fitted into a 40 foot pinnace to the Admiralty's requirements. The motor is fitted with an auxiliary engine of the single-cylinder type for starting purposes. The single-cylinder engine works an air compressor, which forces air into a reservoir, and thus the larger motor is started on the compressed air taken therefrom. The lubricating oil is forced all round the bearings and surfaces to be lubricated by means of a pump driven from a crankshaft, this same shaft also actuating the low-tension magneto machine and the tappet rods employed for the ignition make and break levers. The exhaust gases are water cooled, so that the efficiency of the engine is increased and danger from fire removed. We may say that most of the parts, such as the connecting rods, crankshaft, and other "motion" about the engine are of forged mild steel.



A repeat order has been obtained from the Admiralty for a similar engine to be fitted into a 40-foot Admiral's barge for service at Devonport. A 28-foot launch fitted with a 25 b.h.p. motor for the Argentine Government, among other orders in hand, forms quite an interesting example of the development which is taking place in the use of the internal combustion motor for marine work.

◆

LATEST DETAILS FROM THE JENNINGS FIELD.

Following upon our article last week dealing with the progress which is being made in the Jennings field of Louisiana, it is very interesting to note that great interest continues to be centred in that district, and much activity in drilling is now prevalent. Since our last issue we learn that the latest well of the Heywood Oil Co., which was brought in on the Crowley Oil and Mineral Co.'s farm a few weeks ago, is now producing over 8,000 barrels daily. The location of the well extends the deep sand producing territory in the Louisiana field to a considerable extent. The Heywood Oil Co. is now preparing to drill other wells, two being along the south line of the Crowley property. The latest information of the Louisiana operations is decidedly encouraging, and goes to prove that great things may be expected from this field before very long.

◆

THE BURMA GOVERNMENT AND OIL PROSPECTING LICENCES.

We learn, upon most reliable authority, that the Burma Government is granting fresh licences to prospect for petroleum in certain blocks in the Yenangyaung oil field in the Magwe district.

* * *

DETAILS OF BAKU PRODUCTION.

The following are the detailed figures of the production of the Baku oil fields in August, 1905, as published in the current issue of the *Neftianoye Dielo* :—

	Number of Wells in Exploitation.	Production.				Average per Day per Well.
		By Baling.	By Spouters.	Casual.	Total.	
Balakhany..	612	4,460,125	—	23,933	4,484,058	363
Saboontchi	573	9,911,440	296,500	208,673	10,416,613	896
Ramany	181	6,748,231	945,000	44,000	7,737,231	2,297
Bebe-Aibat..	191	9,564,610	128,200	3,000	9,695,810	2,486
Total in August, 1905	1,557	30,684,406	1,369,700	279,606	32,333,712	1,027
,, July, 1905	1,556	46,176,277	1,842,300	322,407	47,438,184	1,060
,, August, 1904	1,556	53,719,173	994,000	209,106	54,922,279	—

In addition to the above, there was produced at Binigadi, from 12 wells, 12,433 poods; and at Zabrat, from one well, 5,200 poods.

The production by spouters in August was obtained from the following wells :—

Field.	Firm.	No. of Plot.	No. of Well.	Production. Poods.
Saboontchi	Arshalius II. Co.	173	15	6,500
,, ...	Ter-Akopoff	63	6	290,000
Ramany	Caspian Society	40	166	169,000
,, ...	Mantascheff and Co.	58	283	600,000
,, ...	Nobel Bros.	32	350	176,000
Bebe-Aibat	Baku Naphtha Co.	6	4	29,000
,, ...	,, ,, ...	6	5	57.200
,, ...	Schibaieff Co.	29	5	5,000
,, ...	,, ...	29	7	37,000
	Total from 9 wells			1,639,700

THE OIL FIELD OF ILLINOIS.

HISTORY OF OPERATIONS.

Operations at Casey, Clark county, Illinois, and at Westfield, 11 miles north of Casey, indicate that Illinois is one of the coming oil developments of America. Operations in that territory have progressed, says a writer in the current issue of the *Oil Investors' Journal*, to a point where the district is producing 2,000 barrels a day oil of 34° B. The oil is bringing 81 cents at the present time, and it is predicted that it will soon be placed on the same market basis as South, or possibly, North Lima oil. South Lima is now quoted at 89 cents, and North Lima at 94 cents.

Casey is 35 miles west of Terre Haute, Ind., on the Cincinnati, Hamilton and Dayton and the Vandalia railroads, and 134 miles east of East St. Louis, Illinois, or about 25 miles from the Indiana State line. Oil indications in the territory surrounding St. Louis, Mo., and Belleville, Illinois, have long been apparent. In fact, gas wells have been developed in the heart of St. Louis. Further development shewing the presence of oil in paying quantities in this stretch of territory will make Illinois and Missouri the connecting links between the Eastern and Mid-Continent regions, and shew an oil belt extending from Lower Pennsylvania due westward to Colorado.

Oil and gas were known to exist in this territory fifty years ago. Lack of shipping facilities to create a market at that time prevented development to any appreciable extent. It was not until April, 1894, that systematic development was begun.

Writing from Casey, a representative of the *Oil City Derrick* states that up to the present there have been about 300 wells drilled in the field, and the daily production is estimated at between 1,700 and 2,000 barrels. The oil is moved by tank cars. Should the Casey field continue its present showing and develop as rapidly during the next twelve months as it has during the past year, it will then be up among the leading fields in the number of completions. The field to the north of Casey that has the most development work shews three distinct grades of crude, and that many different formations, the oil being found at a depth of from 220 to 400 feet from the surface. These wells, while not large, are shewing very good staying qualities, producing from two to twenty barrels a day. The field, so far as developed, shews that the oil is found in pools, with dry holes around the outside limits. In some spots close to the pools no sand is found, but when a depth of from 500 to 700 feet is reached salt water is found. One feature of the Casey field is that no water of any kind is found above the oil, and no pipe would be needed should the walls of the well hold up, hence the operators are not afraid of fresh water at any point. The sands are white, dark and pebbly, and the crude grades from 26 to 34 gravity. The base of the oil in the north-eastern section of the field is said to be of an asphaltum base and a low grade, while in the other sections, as far as developed, the base is paraffin. The crude brings 81 cents per barrel at the wells, which is an advance of 5 cents per barrel, made on February 1st.

Land is being leased in large blocks from St. Louis, east to the Indiana line. Farmers are alert, and big bonus money is asked for leases. On the inside in the Oil Fields pool, a bonus of $100 per acre and one-eighth royalty has been paid, and at the new strike in Crawford county, at Oblong, prices have gone to $30 per acre for leases since the completion of the test well there a few days ago.

One of the leading features of the Casey field is that the operators are mostly well known and prominent oil men, and not the class that usually invade a new field. There are not any of the "hot-air" concerns in the field like there were in the Beaumont and other booms.

AMERICAN NOTES.

Pipe Line Completion.—The Texas Co.'s pipe line from Jennings to Lake Charles is nearing completion. The line is six inches in diameter, and will be working in a few days.

New Refinery near Brady.—We learn that arrangements are being made to commence an oil refinery at Brady, near Queenstown. The plant will only be on a very small scale for the present.

The Humble Oil Field.—The Humble oil field is now said to be producing about 11,000 barrels per day, this being an average of about 120 barrels daily for the producing wells. During the first half of February there were six completions in the field.

Extension of Spindle Top.—There is now much activity at Spindle Top consequent upon the extension of the proven territory to the north-west by the bringing in of the Nelson-Gordon well on the Trembly land. Eight drilling rigs are now working in the district.

Latest from Leamington.—The latest information from the Leamington field states that for the week ended February 21st 20 cars of crude petroleum were shipped to Sarnia for refining. The total shipments in January were only 42 cars. An improved outlook appears to have come over the Leamington oil district.

New Pipe Line.—The Standard Oil Co. has begun the construction of an eight-inch auxiliary pipe line from Lima, Ohio, to Chicago, connecting at Whiting with the Kansas and Indian Territory trunk line, and making possible the handling of oil underground from the Transmississippi field through Ohio to the seaboard, touching refineries at Lima, Cleveland, and throughout Pennsylvania.

Another Canadian Territory.—We gather from a writer in the *Petrolia Advertiser* that, speaking of the oil prospects in the Tilbury fields, a well-known drilling contractor says that the Tilbury district, which lies north-east of Leamington, is the best in Canada, and that a well now in operation there, while not producing as many barrels as some others in the same length of time, is the best well yet struck in Ontario.

Declining Production in Texas.—Though truly enormous quantities of oil are being raised daily in the Texas districts, it is nevertheless a fact the respective regions are decreasing in their output. Comparing the middle of February with the middle of the preceding month, Humble has decreased 3,000 barrels daily; Dayton, 50; Batson over 1,000; and Sour Lake, 400; Spindle Top being the only region where the production is about stationary.

The Jennings Field.—The Jennings field has maintained a gusher production longer than any other Gulf Coast district. The first flowing well was completed in May, 1902. The deep sand was developed in July, 1904, and there have been flowing wells in the district ever since. It is estimated that the Heywood Oil Co.'s No. 1 well on the Crowley Farm, which was brought in on February 7th, is to-day the largest well in America. It is producing from 8,000 to 9,000 barrels per day.

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{11}{16}$-$\frac{13}{16}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	3/0-3/6
,, ,, ..	£650,000 5½% Pref.	£1	6/9-7/3
Bibi-Eybat Petroleum Co. ..			10/6-11/6
Californian Oilfields	£250,000 Ord.	£1	6½-6⅝
European Petroleum.. ..	£550,000 Pref.	£1	3/0-4/0
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	82-85
Russian Pet. & Liquid Fuel ..	£500,000 6½% Pref.	£1	12/0-13/0
,, ,, ...	£600,000 Ord.	£1	11/0 12/0
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	3½-3¾
,, ,, ...	£575,000 Ord.	£1	9/6-10/6
Shell Transport & Trading ..	£2,000,000	£1	24/0-25/0
,, ,, ,, ..	£1,000,000 Pref.	£10	9⅜-9⅝
Spies Petroleum Company ..	£312,500	10s.	6/9-7/3

SCOTCH COMPANIES.

Supplied by Messrs. Maclean and Henderson, Stirling.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. 8½ pd	£199,750	£10	17¼
Do. 6% Cum. Pref. ..	£100,000	£10	12⅛
Burmah Oil, Ord.	£1,100,000	£1	56s. 0d.
Do. Pref.	£250 000	£1	26s. 0d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	8½
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	18
Do. New (£8 10s. pd.)	£131,750	£10	16¼
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	80s. 0d.
Do. 6% Cum. Pref	£100,000	£10	12⅞
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	31s. 0d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	67s 0d.
Do. "B" Deb...	£150,000	£100	148

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on March 5th.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	519	523
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	3,975	4,025
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	168	170
Neft Co.	250	—	—
Nobel Bros.	5,000	8,650	8,750
,, ,, ...	250	—	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

DUTCH COMPANIES.

Company.	Quotations Feb. 21st.	Quotations March 5th.	Florins.
Arnhemsche Petroleum Mij. ..	80	80	1,000
Dordtsche Petroleum Mij. (Pref.) ..	126	126	500
,, ,, ,, (Deb. 4½%)	102¼	102¾	1,000
Elzasser Petroleum Mij.	2¼x44%liq	2⅛	1,000
Gaboes ,, ,, ...	19¾	19¾	—
Holl. Rumeensche Petroleum Mij...	24½-24⅞	25$\frac{11}{16}$	1,000
Int. Rum. Pet. Mij.	89	89	500
Java Petroleum Mij...	30	30	1,000
Koninklyke Nederl. Pet. Mij. Shares	472-479½	481-484	250-1,000
,, ,, Share certificates	478-480	480½	1,000
Mœara Enim Petroleum Mij. ..	116¾-117	114¾-115¾	100
,, ,, 1-1,000 Oblig. 5	102	102	250-1,0
"Moesi Ilir" Petroleum Mij. ..	35	35½	—
Nederl.-Rumeensche Petroleum Mij.	16	14	.
Nieuwe Ned. Petroleum Mij. And...	55¼	55¼	1,00000
Oliebronnen in Hannover Mij. ..	175	173	—
Panolan Maatschappij Cert. ..	340xd.	340	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	138	138½	1,000
,, ,, (Common) ..	92¼	93	—
Sumatra-Palembang Petroleum Mij	60	60	500

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 8th March, 1906, as follows:—

The market is very depressed, and it becomes more and more apparent that it is suffering from over-production. A number of mills have been closed down, and further stoppages are imminent. We make prices of oil sizes to-day as under. Some large business for American account for early delivery has been done at about these figures.

The exports continue good, as will be seen from the figures for the month of February and for the two months ended February, which we give herewith. It will be noted that not only are the total quantities larger, but there is a very considerable increase in values:—

IC	18¾ × 14	124 sheets	110 lbs.	12/9 to 12/10½ per box.
IC	19¼ × 14	120 ,,	110 ,,	12/9 ,, 12/10½ ,,
IC	20 × 10	225 ,,	156 ,,	18/- ,, 18/3 ,,

F.o.b. Wales. Tin lining and iron hooping extra.

SHIPMENTS OF TIN PLATES.

Month of February.

	Quantity.		Value.	
	1905. Tons.	1906. Tons.	1905. £	1906. £
Russia	2,730	158	35,797	1,583
Germany	2,225	3,840	30,249	51,366
Netherlands ..	1,957	1,947	25,470	26,233
Belgium	582	1,495	7,591	20,429
France	669	1,911	8,854	25,246
Portugal	528	733	6,387	8,990
U.S A.	6,390	4,068	79,303	51,076
British East Indies.	3,017	4,251	39,560	57,744
Australia	983	1,517	12,164	18,061
Canada	1,912	462	26,410	6,600
Other Countries ..	7,968	12,099	105,705	153,578
Total	28,961	32,481	377,490	420,906

Two Months ended February.

	Quantity.		Value.	
	1905. Tons.	1906. Tons.	1905. £	1906. £
Russia	4,745	216	60,988	2,190
Germany	4,119	5,662	55,948	75,421
Netherlands ..	3,933	5,504	51,321	74,569
Belgium	1,304	2,085	16,947	28,509
France	1,566	3,326	20,441	44,303
Portugal	1,352	1,267	17,050	15,811
U.S.A.	12,833	7,260	158,154	91,314
British East Indies.	5,924	8,745	76,293	117,330
Australia	1,868	4,234	23,235	51,854
Canada	3,011	1,404	40,646	20,732
Other Countries ..	18,229	21,851	235,705	280,136
Total	58,884	61,544	756,728	802,169

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SATURDAY, MARCH 10TH, 1906.

THE FUTURE OF OIL AS AN ILLUMINANT.

NO apology is needed in again referring to the subject touched upon in our leader columns last week, for it is one, affecting as it does the very existence of the future trade in illuminating oils in this country, upon which too much stress cannot possible be laid. Our readers, we take it, will be familiar with the expressions we have already given vent to, and we have reason to hope that they will see the matter in the same serious light as ourselves. Here are the facts. The petroleum industry has for a long time been contented to take a back seat so far as the use of illuminating oils is concerned, and the result—the inevitable result—is that powerful competitors appearing in the field have, by consistent perseverance on the part of their advocates, succeeded to a very great extent in taking away the consumers of illuminating oil and converting them to the use of some other illuminant.

We all know that in England alone, where there is such a wide sphere of usefulness for almost a hundred and one kinds of illuminating powers, this change from one light to another has taken place slowly, but nevertheless surely, though imperceptibly, and it has now reached such a stage that it must be to all thinking minds one of the greatest seriousness. The use of oil as an illuminant is on the wane in this country, and the economical lamp has upon many hands been pushed aside, not because it has been superseded by something infinitely better or even cheaper, but because its light has, to use a common expression, been hid under a bushel, while the claims of other illuminants have been placed in the best possible way before consumers, and every possible inducement held out to the public.

Last week we suggested on broad lines what would undoubtedly be a remedy, and since a remedy *must* be found, it is well that the matter should receive more than cursory consideration. Among the oil distributing firms in the City, we are pleased to learn that the subject has appealed in all its seriousness, for it is evident that matters must be righted and that quickly, otherwise a most important branch of the petroleum industry will be weakened, if not gradually become defunct.

But so far as we can judge, there seems to be a general disinclination to take individual action, and consequently in the absence of any public-minded spirit, there is just that chance that matters may be allowed to take their own course. Those who have been approached by us upon the matter contend that nothing short of concerted action can bring about a remedy, or at least start the ball rolling. The start of course is the only thing required, for when once a movement is initiated to place the claims of oil as an illuminant before the populace, who, we regret to admit, have but a very flimsy knowledge on the subject, progress most assuredly will follow.

Experience has shewn over and over again that there is scarcely an industry in existence—that there is scarcely one flourishing branch of commerce—which is not the outcome of some great amount of pioneer work willingly undertaken for the general good of the cause. We have many instances of this—in politics and science, in religion and in the general channel of trade. Progress can almost without variance be traced to individual effort, and, though the results have been reaped not by so many units but by the whole, the pioneer work of some public spirited pioneer will be found to always be responsible.

Let us bring the matter closer to our own industry. Some fifteen years ago, solar oil was first introduced in this country for gas enrichment purposes, it being placed upon the English market by a firm interested in the marketing of Russian oil. Experiments were successfully carried out at the Beckton works of the Gas Light and Coke Co. by Dr. Dvorkovitz, where ten sets of carburetting apparatus designed to specially use petroleum spirit the carburetting material were experimented with. The system of using petroleum spirit we know was widely adopted in America, where such spirit was then a drug in the market, but when this came to this country in barrels it proved to be a somewhat expensive carburetting material, and so had not the experiments with solar oil been carried successfully through at that time, the gas companies to-day would be in a strangely different position to that in which they now find themselves.

The use of solar oil for gas enriching purposes has in this country alone made little less than remarkable progress since its introduction, and the quantities utilised are yearly increasing. For instance, in 1904 no less than 57,000,000 gallons were imported into the United Kingdom for that purpose, which came in almost equal quantities from America and Russia, while last year over 62,000,000 gallons were used at the different gas works throughout the country. Here we see what an important field has opened out before solar oil, for to-day one-fifth of the oil imported is used in the enrichment of gas. Therefore, although the pioneer work was borne by one company, and was conducted upon very modest lines, the result is seen in the fact that the carburetting of water gas has been revolutionised, and a great gain to the petroleum industry has accrued.

And so it must be in regard to any efforts put forward to bring the claims of oil as an illuminant more to the front. Concerted action can of course achieve results denied to the individual, but with individual labour alone must it rest to lead the way. It may be that in future issues some scheme will be laid before our readers as to the best way to accomplish what we argue is an absolute necessity, but for the present we trust that one word to the wise is sufficient.

LONDON OIL SHARE MARKET.

Friday, March 9th.

The Oil Share section of the London Stock Exchange shews no sign of improvement, quotations day by day being in the large majority of cases merely repetitions of previous values, and, where changes occur, depreciation being the order of the day. At the mid-March Settlement, which commenced on Wednesday, the amount of business to be adjusted proved of the smallest possible dimensions, and the rates for Contango ruled at about 6 to 8 per cent.

A comparison of the making up prices with those fixed for the end-February account discloses only one small advance, viz., 3d. in Shell Transport Ordinary at $1\frac{1}{4}$. On the other hand, Russian Ordinary lost 2s. 3d. per share at $\frac{5}{8}$, Preference 9d. at 13s., Schibaieff Ordinary and Spies ditto at $\frac{1}{2}$ and 7s. respectively, while Baku Ordinary declined 6d. at 3s.. Schibaieff Preference at $3\frac{5}{8}$, Anglo-Russians at $\frac{1}{8}$ and Baku Preference at 7s. were without change.

For a *resumé* of the week, we revert to Saturday last, when Anglo-Russians were quoted $\frac{1}{16}$-$\frac{1}{8}$, Assam Oil $\frac{5}{8}$-$\frac{7}{8}$, Baku Ordinary 3s. to 3s. 6d., Preference 6s. 9d. to 7s. 3d., Bibi-Eybats $\frac{1}{2}$-$\frac{5}{8}$, Debentures 88-93, Californian Oil Fields $6\frac{3}{8}$-$6\frac{5}{8}$, Refineries $\frac{3}{8}$-$\frac{1}{2}$, European Preference $\frac{1}{8}$-$\frac{1}{4}$, Debentures, 81-86, Russian Ordinary 12s. to 13s., Preference 13s. 6d. to 14s. 6d., Debentures, 87-90, Schibaieff Ordinary 10s. 3d. to 10s. 9d.; Preference $3\frac{3}{8}$-$3\frac{5}{8}$; Shell Transport Ordinary 24s. 6d. to 25s., Preference $9\frac{1}{4}$-$9\frac{3}{4}$, and Spies $\frac{11}{32}$-$\frac{13}{32}$. Since then the only alterations are, a fall on Tuesday in Russian Preference of 1s. 6d. to 12s. to 13s., and on Thursday of $\frac{1}{32}$ in in Spies at $\frac{5}{16}$-$\frac{3}{8}$.

ROUMANIAN NOTES.

The Refinery of the Romano-American Co. has now commenced to work regularly.

Crude Oil is now in great demand in Roumania, but practically the whole of the production for the current year is sold to the refineries.

The Shell Co. is reported to have commenced negotiations with the Aurora Co. with a view to a resumption of the trade relations between the two firms. At the time of writing no satisfactory result had been reached.

The Baicoi Moreni Syndicate has abandoned their well at Moreni, when a depth of 520 metres had been reached, for no oil was struck. The syndicate is drilling a new well in the same locality. Should any of the neighbouring wells, now in course of drilling, yield good results, the abandoned well will again be taken in hand.

The Production in Roumania is certain to shew an increase this month as a result of the prolific spouter struck by the Steaua Romana at Baicoi and by the increased output of the Telega Oil Co., which has now reached 240 tons daily. The combined output of the Telega and Bustenari Companies now exceeds that of the Steaua Romana.

The Aurora Co. has secured a contract for the supply of residuals to the Roumanian Marine Service. The contract is for three years, 30,000 tons per annum, or 90,000 tons in all. The price is to be 28 francs per ton in tank waggons at Baicoi station. The oil is to be used as fuel on the Roumanian steamers plying on the Black Sea.

Wanted! A Cartel.—The Roumanian refiners, in view of the approach of the time when the Roumanian State railways conclude their contracts for liquid fuel supplies, have commenced negotiations for the formation of a cartel for the sale of residuals, but no agreement has as yet been arrived at. The State railways decline to go beyond their price of 26 francs per ton, whilst the refiners demand an increase of 3 francs in view of the enhanced price of crude oil.

BATOUM PETROLEUM SHIPMENTS.

The shipments of petroleum products from Batoum during the week ended February 18th (o.s.) were as under (in poods):—

	Illuminating oil.		Other products.	
	1905.	1906.	1905.	1906.
To Europe ..	184,000	—	195,000	222,000
To the East ..	375,000	11,000	79,000	—
To Russian Ports	108,000	127,000	—	8,000
From Jan. 1st to Feb. 18th:—				
To Europe ..	2,653,000	955,000	913,000	479 000
To the East ..	2,508,000	629,000	80,000	—
To Russian Ports	636,000	640,000	—	21,000

ASTRAKHAN OIL MERCHANTS AND THE SHIPOWNERS.

It will be remembered that immediately after the disastrous events at Baku, the Astrakhan oil merchants, in order to assist the small shipowners, have agreed among themselves to place 400,000 poods of residuals at the disposal of a committee, which would supply the same to the shipowners pro rata of their requirements at comparatively moderate prices. The deliveries of this oil began on September 2nd and ceased in December, and amounted in all to 333,484 poods, namely, 92,697 poods in September, 132,047 poods in October, 97,605 poods in November, and 11,135 poods in December. The price, which was originally fixed at 40 copecs, was subsequently reduced to 35 copecs per pood, being in both cases below the market quotation.

THE NIGERIA PROPERTIES, LIMITED.

ENCOURAGING OIL PROSPECTS.

Presiding on Thursday at a meeting of the shareholders of the Nigeria Properties, Ltd., Mr. George Macdonald said that although he would postpone the statement he had to make with regard to the bitumen and the possibilities of petroleum in West Africa until the meeting of the Nigeria and West Africa Company, he felt that the matter was of such importance—commercial importance—that the widest publicity that they could give to it would be of the greatest benefit to the shareholders in the Nigeria Bitumen Corporation. He felt that there was very little doubt that they would have a petroleum field in that part of West Africa. The bitumen was of such a nature that the various grades of petroleum, from the lightest burning oil to the heaviest lubricating oil, could be obtained by process of distillation, and there was every reason to believe that, either in the immediate vicinity where those deposits existed, or close outside the areas, they would in the course of time discover petroleum in its liquid form, and there was no less doubt, if that were the case, build up a commercial industry in West Africa which would be the first of the kind in that continent, and that would compare very favourably with the oil industries in other parts of the world.

THE ANGLO-CALIFORNIAN OIL SYNDICATE, LTD.

The statutory meeting of the shareholders of the Anglo-Californian Oil Syndicate is to be held at Winchester House next Monday at noon. The report which has been issued to the shareholders shews that the total number of shares allotted is 40,693, but pending completion of the title to property, the 9,000 shares eventually payable to the vendors have not yet been allotted. So far, ten shillings per share has been called up, thus making £20,346 10s. The details of finances shew a cash balance in London and California of £13,673 15s. 2d.

GALICIAN PRODUCTION IN JANUARY.

The following were the quantities of crude oil produced at the various oil fields in Galicia in January, 1906:—

	Production. (Tons).	Stocks on Jan. 31 (Tons).
West Galicia—		
Potok	1,611	5,593
Rogi	1,168	13,390
Rowne	145	271
Tarnawa-Wielopole-Zagorz ..	2,548	7,598
Krosno	3,383	13,580
Other Fields in West Galicia ..	2,848	10,621
East Galicia—		
Boryslaw-Tustanowice	41,586	406 643
Schodnica	4,290	32,286
Urycz	1,400	20,989
Mraczica	140	1,861
Other Fields in East Galicia ..	1,010	310
Total	60,130	511,343

AN IMPROVED DEEP BORING MACHINE.

An English patent has recently been granted Messrs. Robert Magee Downie, manufacturer, and the Keystone Driller Co., both of Beaver Falls, county of Beaver, and State of Pennsylvania, United States of America, for an invention relating more particularly to portable machines for drilling oil wells and the like. Heretofore the depth of wells drilled by such machines has been limited, and stationary rigs built on the spot have almost universally been employed for drilling those of the deeper class. These stationary rigs, so the specification states, require a large area of ground to accommodate them, together with much time and great expense in construction. When the well is completed, the material, such as derrick lumber, foundations, and the like, is of little value. One of the objects of the present invention is to provide a machine of a portable character that will drill deep wells with speed and efficiency. Various advantageous features of the invention, however, are not limited for use in connection with the heavier or portable structures, but may be employed in lighter machines, all of which will be evident to those skilled in the art when the nature of the invention is fully understood.

Another object is to provide certain combinations of elements which completely avoids the necessity of slow, uncertain power-distributing frictional, or other easily destructible gearing for the cable reel, or for the intermediate shafting, thus avoiding all necessity of large and cumbersome bull wheels. A still further object is to reduce the manipulation of the entire drilling machine, including the pump reel, to a few simple and easily operated levers, all conveniently grouped within convenient reach of the driller at the well.

In the structure illustrated, a frame is employed consisting of spaced longitudinally disposed sills 1, connected by cross bars 2, said frame being mounted upon suitable ground wheels 3, the bolster for the front bar being connected to the frame by a brace 4, the rear wheels having brakes 5 co-acting therewith. Located at one end of the frame is a suitable mast 6, supported on a transverse sleeper 7. This mast may, if desired, be supplanted by any well-known form of derrick, and carries at its upper end the usual crown sheave or pulley (not shewn).

Journaled on the rear portion of the machine and in suitable boxings 8, secured to the sills, is a drive shaft 9, located transversely at the frame and having its ends projecting beyond the sills. One end of the shaft 9 has a band wheel 10 provided with a peripheral rim 11, said wheel being located outside the adjacent sill. An engine 12 of any well-known or desired form is mounted upon one of the front corners of the machine, and is provided with a shaft 13 carrying a pulley 14, located in line with the band wheel. A belt 15 passes about the band wheel and pulley, and this constitutes the connecting means between the engine and drive shaft. It will, of course, be understood that the engine is not necessarily mounted on the machine, and may be located at any desired point so long as the pulley 14 thereof remains in line with the band wheel and opposite to the friction wheel of the sand pump reel, as is hereinafter more fully described. The ends of the shafts 9 and 13 project respectively beyond the band wheel and pulley, and are journaled in boxings 16, connected by a tension or reach bar 17 having nuts 18 threaded thereon and bearing against the boxings, so that said reach is thus made extensible to obtain the separation of the shafts, and thereby placing any desired degree of tension upon the belt 15.

Keyed or otherwise suitably secured to the end of the drive shaft 9, opposite that carrying the band wheel, is a drive wheel 19, that is located outside the adjacent sills of the frame. This drive wheel is provided with a peripheral series of teeth 20, and one of the spokes thereof is off-set or located in outstanding relation, being provided with a series of radially disposed openings 22. This wheel constitutes the main driving wheel for the various drilling mechanisms, which will now be described.

A samson post 23 is mounted upon the frame and over the front axle, being suitably held by braces 24. Upon the upper end of this samson post is saddled a walking beam 25, the free end of which is provided with a suitable clutch 26 for the temper screw. The opposite end carries a pitman 27, the lower end of which is adapted to be detachably connected with the driving wheel by means of a wrist pin 27ª that may be engaged in any of the openings 22.

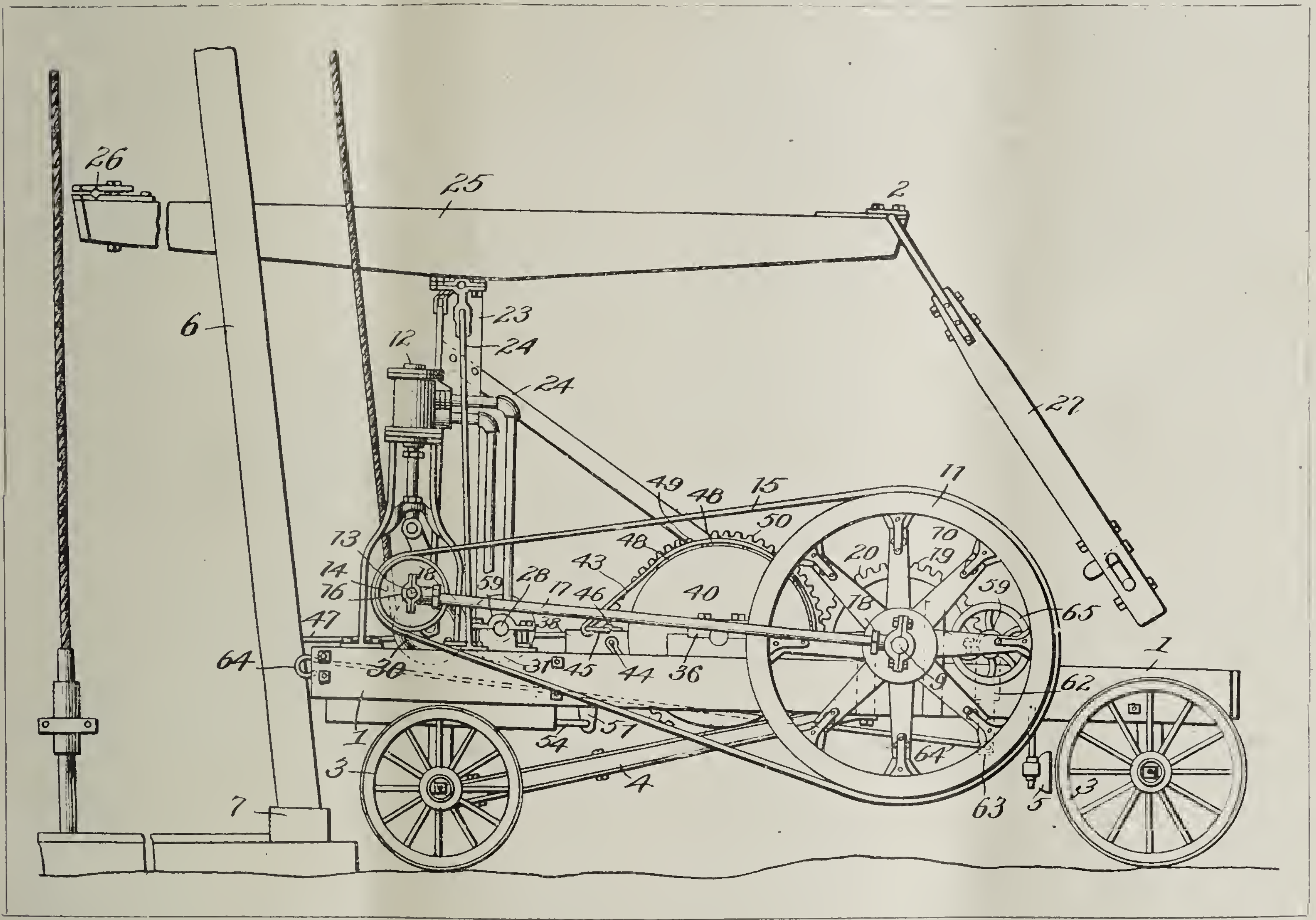
Spudding and pipe driving mechanism are also employed in this machine, said mechanism comprising a rock shaft 28 journaled upon the front portion of the machine and having a forwardly extending crank arm 29. A spudding sheave 30 is journaled upon the free end of this crank arm, being located at one side of the same. An idler 31 is loosely journaled on the rock shaft at one side of the crank arm and in line with the spudding sheave. The rock shaft projects beyond one side of the frame and has a depending crank arm 32, located outside the adjacent sill, and on the side of the machine carrying the drive wheel. This crank arm 32 can be connected with the drive wheel by means of a pitman 33 having a pivoted connection 34 with the lower end of the same, the opposite end being attached to the drive wheel by means of the wrist pin 27ª.

A cable reel is located on the frame between the driving shaft and the spudding mechanism. Said reel consists of a shaft 35, one end of which is journaled in a boxing 36 attached to one sill, the other end being journaled in a boxing 37 mounted on a carrier block 38 that is slidably arranged on the other sill, said carrier block being held against lateral displacement by means of stirrups or yokes 39 attached to the sill and embracing the block. The shaft 35 is provided with end discs 40 and 41 constituting the ends of the reel, the disc 41 having a groove 42 in its periphery and forming a brake wheel. Co-acting with this wheel is a band 43 anchored at one end, as shewn at 44, to the carrier block 38, the other end being fastened to a crank lever 45 journaled at 46 to the block, and having a forwardly extending handle arm 47 that projects to the front of the machine, in convenient relation to the driller. The band 43 carries on its inner face a shoe formed of a plurality of blocks 48 spaced apart and detachably secured to the band by bolts 49. These blocks are substantially V-shaped in cross section, and are adapted to fit in the groove 42 of the wheel. The shaft 35 projects beyond one of the sills and carries on said projecting end a gear wheel 50, that is movable into and out of co-acting mesh with the peripheral teeth of the drive wheel when the carrier block is moved. This movement is accomplished by means of a lever 51 pivoted at 52 to the sill, and having a connection 53 with the block. The lower end of the lever 51 has a link connection 54 with a bell crank lever 55 pivoted to the sill, one arm 56 of said lever being disposed in depending relation, and connected with the link 54, the other arm 57 extending to the front of the machine, where it may be readily operated by the driller.

In connection with the mechanism, there is of course employed as sand pump reel, which is shewn at 58, being journaled in boxings 59 carried by the sills. One of the boxings is in the form of a cam 60, fitted in a suitable two-part bearing 61, and having a depending finger 62, to which is secured an operating lever 63. To the lower end of the lever is secured a handle link 64, that extends to the front end of the machine at one side of the mast. The end of the shaft that is located in the cam 60 carries a friction wheel 65 located inside the band wheel 11, and movable into engagement with the inner face of that portion of the rim which is borne against by the belt. In other words, the bearing of the wheel 65 is in line with the shafts 9 and 13, and in opposition to the pull of the belt.

It is believed that the operation of this machine will be readily understood. When spudding in or driving casing the driving mechanism is employed. The cable or rope is therefore passed from the reel over the idler 31 beneath the spudding sheave 30 and over the crown pulley. The rock shaft 28 is connected with the drive wheel by means of the pitman 33 and an oscillatory movement is therefore given to the rope. On account of the particular arrangement of the spudding sheave the rope will parallel the mast and thus all vibration and lateral strain thereto are overcome. The drilling cable, moreover, during this operation does not travel in the sheave or idler, but simply rests therein, thus preventing the excessive chafing of the cable which ordinarily occurs at this point. Another advantage gained by this part of the invention is the constantly accelerated speed imparted to the drilling cable during each downward stroke of the pulling cable and corresponding upstroke of the drilling tool. In order to fully understand this, it is necessary to state that at the exact instant of time when the drilling tool impinges upon the bottom of the drill hole, the cable is drawn very rigid, and at this point of time also the tool has not only a great tendency to wedge itself fast in the bottom of the hole, but in order to obtain rapid work the direction of said drilling tool must be instantly reversed from a downward to an upward motion. The more quickly the drilling tool is lifted the greater the height to which it will be thrown, the more strokes will be made to the minute, and consequently, the greater the speed of drilling. By this arrangement the greatest speed is obtained at the beginning of the up stroke of the drilling tool when the greatest power is needed to start it, or, in other words, reverse the movement, and the greatest speed of ascent is obtained at the top of the stroke just when it is most needed. Therefore, it will be understood that, when the drilling tool is at the bottom of its down stroke, the spudding sheave will be at the highest limit of travel, and the cable will not be bent over the idler. At this point of the stroke, a descent of one inch on the spudding sheave will elevate the drilling tool the same distance, but as the spudding sheave descends further, the position of the idler serves to constantly increase the effect of the downward motion, and experience has demonstrated that one inch of movement on the part of the spudding sheave will elevate the drilling tool two inches or more. As a result of this specific combination, the operator can run his tools on the "spring of the line" from the start. Moreover, the length of the stroke can be changed at will by simply moving the wrist pin 27^a toward or from the axis of rotation of the drive wheel. Thus in case the drive pipe is extra large, or if for any reason it is hard to drive, the stroke can be increased to a very great extent.

After the drill has been well started, the walking beam can be brought into operation, this being easily accomplished by simply detaching the pitman 33 from the wrist pin 27^a and connecting the pitman 27 of said walking beam thereto.



The operation of the cable reel will now be described. When it is desired to hold the reel stationary, the carrier block 38 is moved so that the gear wheel 50 is out of mesh with the drive wheel and the brake is set. On the other hand, if it is desired to raise the string tools or draw of the casing, it is only necessary to actuate the arm 57 of the bell crank lever, thereby moving the carrier block so as to throw the gear wheels into mesh, at the same time releasing the brake. It will be apparent that, because of the mounting of the brake on the movable carrier block, said brake can be moved into and out of co-acting relation with the wheel thereof, without regard to the position of the gear wheels. This is a very important feature. The structure of the brake has also distinct advantages. Heretofore it has been the common custom to employ large wooden wheels in connection with flat iron bands. These wheels were extremely subject to wear and under rapid motion, as, for instance, in running heavy tools rapidly into a deep well, they would take fire from the friction generated, unless water was constantly applied thereto. On the other hand, in the present construction, the wheel being of metal will not readily wear, and the segments of the shoe being spaced apart admit air which to a great extent keeps them cool. Moreover, the blocks when worn out can be quickly replaced at nominal expense. The V-shaped construction of the groove and shoe not only prevents the possibility of the brake band shifting laterally, but this shape gives said shoe such a quick and strong contact with a minimum pressure that the mere weight of the hand lever 47 is sufficient of itself to stop and safely hold the heavy drilling tools at any point without other fastenings. In addition to these advantages, the V-shaped blocks present a maximum of friction surface without materially decreasing the cable space of the reel. This in turn, and owing to the form of wedge-shaped blocks, permits the construction of a wheel having the same efficiency with a diameter less than one-half that of the flat faced friction wheel above described.

It is also desired to call attention to the specific arrangement of the said pump reel. We are aware that it is not new to drive this reel by means of a friction wheel that bears against a band wheel, but said friction wheel has been placed indiscriminately and has a deteriorating effect on the band wheel. This will be appreciated when it is understood that the band wheel is constructed of wooden segments, while the friction wheel must be pressed with great force against the inner face of the same in order to draw a sand pump and line weighing, say, a ton or more rapidly from a well two thousand or three thousand feet deep. This pressure, of necessity, soons loosens and bursts outwardly the wooden segments of which the wheel is composed. In the present instance all objections of this nature are obviated for the reason that the friction wheel bears firmly against that part of the rim of the band wheel that is fully supported by the heavy driving belt. In other words, the rim of the band wheel becomes merely an intermediary friction circle between the driving belt and the friction wheel, and said rim can be made much lighter than otherwise, because having an indefinitely greater amount of durability. There are also advantages for having the different wheels shewn located outside the sills, for said wheels may be removed if desired during transportation. Moreover, the driving belt can be tightened to any extent through the medium of the reach, or by contracting said reach the belt may be loosened so that it can be readily removed. The location of the gear wheels on the outside of the frame with the friction brake inside of the adjacent sills and close to the bearing is important, because of the safety gained. By the possible breaking of the intervening journal, when drawing or lowering the drilling tool, or the accidental breaking of the winding gear, the operator would normally lose entire control of the drilling tools, and they might be dropped to destruction. The same thing might also occur when handling heavy strings of casing. By the present arrangement an accident of this kind cannot occur.

From the foregoing it will be evident that the machine has many very great advantages due to the particular arrangement and construction of the parts.

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EXPERIMENTS WITH A NEW LIQUID FUEL.

In experimenting with a new liquid fuel, the principal ingredient of which is petroleum, the U.S. torpedo boat "McKee" made a run of 10 miles in an official trial off Newport, R.I., January 30th, in 37 minutes, five minutes better time than she took to cover the same distance with the best hand-picked Pocahontas coal. The "McKee" made four complete runs of 10 miles each, with a turn, steaming in all more than 40 miles with the petroleum fuel, and the furnaces were found practically clean at the end of the trial. It was said the new fuel produced better steam than the hand-picked coal, and the test is regarded as very satisfactory.

THE PETROLEUM TRADE OF NOVOROSSISK IN 1905.

The arrivals of petroleum products at Novorossisk from Baku and Grosny in 1905, compared to 1904, were as under:—

	1905.		
	From Baku.	From Grosny.	Total.
Kerosene	6,474,831	846,492	7,321,323
Solar Oil	117,769	—	117,769
Residuals	1,169,683	—	1,169,683
Ligroin	—	463,493	463,493
Kerosene Distillate	—	—	—
Crude Oil.. ..	—	2,253,640	2,253,640
Light Benzine ..	—	265,788	265,788
Total.. ..	7,762,283	3,829,413	11,591,696

	1904.		
	From Baku.	From Grosny.	Total.
Kerosene.. ..	21,182,871	1,400,594	22,583,465
Solar Oil.. ..	850,638	—	850,638
Residuals ..	901,959	1,156,689	2,058,648
Ligroin	91,811	979,346	1,071,157
Kerosene Distillate	—	492,109	492,109
Crude Oil ..	—	4,577,489	4,577,489
Light Benzine..	—	17,718	17,718
Total ..	23,027,279	8,623,845	31,651,124

The shipments of petroleum products from Novorossisk in 1905, compared to 1904, to foreign and Russian ports were:—

	1905.		
	Abroad.	To Russia.	Total.
Kerosene	8.255,059	724,140	8,979,199
Solar Oil	380,424	—	380,424
Residuals	1,277,457	847,285	2,124,742
Ligroin	249,319	—	249,319
Kerosene Distillate	375,860	—	375,860
Crude Oil	—	2,468	2,468
Benzine Distillate..	—	340	340
Light Benzine ..	162,430	1,784	164,214
Goodron	—	2,249	2,249
Total	10,700,549	1,578,266	12,278,815

	1904.		
	Abroad.	To Russia.	Total.
Kerosene	20,732,643	1,043,834	21,776,477
Solar Oil	885,448	—	885,408
Residuals	1,455,876	1,586,729	3,042,605
Ligroin	838,607	15	838,622
Kerosene Distillate	451,675	—	461,675
Crude Oil.. ..	—	3,262	3,262
Benzine Distillate	55,118	796	55,914
Light Benzine ..	—	5,061	5,061
Goodron	—	1,519	1,519
Total	24,419,327	2,641,216	27,060,543

The stocks of petroleum products at Novorossisk on the 1st of January, 1906, compared to the 1st January, 1905, were:—

	1st January.	
	1906.	1905.
Crude Oil	108,000	72,730
Kerosene and Kerosene Distillate..	594,880	3,394,014
Solar Oil	146,000	350,685
Benzine and Ligroin..	298,900	286,795
Residuals	1,090,000	1,087,023
Other Products	24,800	26,000
Total	2,262,580	5,217,247

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Jennings Shipments.—The shipments of Jennings oil in train loads to Texas points in January are reported in the *Oil Investors' Journal* to be as follows:—From Jennings to Gladys, 69,473 barrels; from Jennings to Sabine, 83,145 barrels.

The American Oil Market.

New York, Week ended Feb. 24th.

The reports from the producing districts during the past week shew improvement in results, there having been a number of completions of what may be classed as good wells and some large, and in one case at least it is believed the incoming of an important well secures an extension to producing territory that may result in opening up a section which may add materially to the total production, as it is the belief that the territory in that section will prove prolific. While the majority of the wells completed during the past week have been small pumpers, and the percentage of dry holes shews no diminution, the average production of the new wells shews decided improvement, and drillers are greatly encouraged by the new strikes, which have proved unexpectedly important. There is more development work in progress, says the *Oil, Paint and Drug Reporter*, and numerous new locations have been made in the vicinity of the big wells brought in. Some of the operators predict an early increase in the total production, basing their belief on the discoveries of the past week, and claim that none of the territory exploited should be regarded as unproductive, although most of it has been so regarded. Should a few more good wells be found in previously untried sections, it will give an impetus to wild cat operations, the results of which time alone can determine. In the mid-continent fields operations continue unchecked, although the greater part of the production goes into storage tanks. In Texas the production is decreasing, but in Louisiana there appears to be a steady increase, the output in the Jennings field now exceeding 25,000 barrels a day. Latest quotations for Texas oil show no change from those heretofore published.

Refined and Products.—There has been a decided falling off in the demand for refined for export, due to the altered position of the tank fleet, there being no change in the conditions in the European markets. The Russian situation appears to be clearing steadily, and work is being prosecuted at Baku, but it will be some time yet before important shipments of refined are made from Batoum. The engagements during the past week have amounted to about 150,000 barrels, all for shipment in bulk.

The price for barreled oil has remained steady at 7·60c. for New York loading, and at 7·55c. for Philadelphia loading. The principal foreign markets are steady. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. 3d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export have been in active request, and sales of about 500,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in light request, and sales of about 20,000 barrels are reported. Pennsylvania crude is quoted at 7·60c. in barrels.

Crude naphtha continues steady. For export, sales of about 5,000 barrels have been reported.

CLOSING QUOTATIONS.

Crude.		Week ended	
		Feb. 17. 1906.	Feb. 24. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk		4·70	4·70
Residuum, bbls for export		6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were:—

	Week ended	
	Feb. 24. 1905.	Feb. 24. 1906.
Tiona	1·54	1·68
Pennsylvania	1·39	1·58
North Lima	0·93	0·94
South Lima	0·88	0·89
Indiana	0·88	0·89
Canadian Oil:		
Petrolia	1·33	1·34

Refined—For Export.

		Week ended	
		Feb. 17.	Feb. 24.
Cargo Lots for export	per gal.	7·60	7·60
In bulk		4·70	4·70
Philadelphia loading		7·55	7·55

Refined in Cases—110 Fire Test.

	Week ending	
	Feb. 17.	Feb. 24.
5,000 to 10,000	10·35	10·35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended	
		Feb. 17.	Feb. 24.
120 fire test, S.W.	per gal.	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ending	
	Feb. 17.	Feb. 24.
Naphtha, crude, car lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	17	17

Pennsylvania Oil Runs from Feb. 16th to Feb. 21st were:—Feb. 16th, 71,093; Feb. 17th and 18th, 80,748; Feb. 19th, 52,979; Feb. 20th, 65,518; Feb. 21st, 62,421; For the month of January, 2,223,928.

The Deliveries of Pennsylvania Oil for the same dates were:—74,874; 82,700; 92,620; 75,779; 81,436; For the month of January, 2,374,247.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended Feb. 23 and from Jan. 1, were as follows:—

	Week.	Year.	1905.
Refined, barrels and bulk	160,400	1,759,200	1,275,200
Refined, cases	495,000	2,331,000	4,996,000
Crude, barrels and bulk	21,900	330,100	174,600
Crude, cases	40,000	65,000	30,000
Naphtha, barrels	—	57,600	114,600
Residuum, barrels	—	104,100	150,800
Lubricating, barrels	14,300	68,200	17,000
Total, barrels cde. eq.	452,104	3,974,954	4,005,889

Clearances for the Week.

During the week ended Feb. 23rd, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1905.
Refined	9,025,460	67,897,820	64,385,372
Crude	—	8,200	114,489
Naphtha	625,200	1,886,850	2,162,929
Residuum	—	—	2,744,915

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Feb. 23rd	12,033,947
Total from New York, from Jan. 1, 1906	90,545,293
Same period last year	86,061,652
Increase	4,483,641
From United States, week ended Feb. 23rd	18,971,147
Total from United States, since Jan. 1, 1906	171,523,260
Same period last year	140,200,054
Increase	31,323,206

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The "Review" Shipping List.

MARCH 8, 1905.

Specially Prepared for this Journal.

NOTE.—Except when otherwise stated the Vessels are Steamers.

(*The following abbreviations are used in this table:*—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For	Latest Date and Position.
ALICE ISABELLE	Philadelphia	Sables d'Olonne	L. Feb. 27
ALCHYMIST	Salzaete	London	Arr. Mar. 5
AMERICAN	Antwerp	New York	P. Lizard, Mar. 3
APPALACHEE	SanFrancisco	Shanghai	L. Honolulu, Feb. 22
APSCHERON	Venice	Batoum	L. Feb. 27
ARAL	Tyne	Philadelphia	P. Dunnet Head, Mar. 5
ARAS	Newport	Novorossisk	P. Barry Island, Mar. 6
ARGYLL	Honolulu	SanFrancisco	Arr. Mar. 4
ASTRAKHAN	Tyne	Philadelphia	Arr. Feb. 14
AUGUST KORFF	Philadelphia	Bremen	Arr. Feb. 28
AUREOLE	Tyne	Nantucket	P. Dunnet Head, Mar. 6
AZOV	Coleta Buena	Callao	Arr. Nov. 16
BAKU STANDARD	Rouen	Tyne	Arr. Mar. 2
BALAKANI	Port Arthur (Texas)	Manchester	Arr. Feb. 19
BATOUM	Tyne	Port Arthur (Texas)	P. Dunnet Head, Feb. 17
BAYONNE	New York	Tunis	P. Gibraltar, Mar. 2
BEACON LIGHT	Penarth	Philadelphia	L. Mar. 4
BEME	Bombay	Rangoon	L. Feb. 2
BLOOMFIELD	New York	Flushing	L. Feb. 17
BORJOM	Alexandria	Batoum	Arr. Const'ple, Feb. 20
BRILLIANT	New York	Hamburg	Arr. Feb. 22
BROADMAYNE	Kustendje	Cette	Arr. Mar. 5
BULLMOUTH	Shanghai	—	L. Feb. 25
BULYSSES	Kustendje	Antwerp	L. Feb. 13
BURGERMEISTER PETERSEN	Stettin	New York	L. Mar. 4
CADAGUA	—	—	In port, Bilbao, Feb. 21
CALCUTTA (Br. bq.)	Newcastle (N.S.W).	SanFrancisco	Arr. Feb. 17
CARDIUM	Singapore	—	L. Jan. 23
CAUCASIAN	Philadelphia	London	Arr. Feb. 19
CHARLOIS	Rotterdam	Philadelphia	L. Mar. 3
CHESAPEAKE	New York	Hamburg	Arr. Mar. 4
CHESTER	Antwerp	Philadelphia	Arr. Mar. 6
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	BalekPappan	Sambce	Arr. Mar. 5
COL. E. L. DRAKE	New York	Galveston	L. Oct. 25
COWRIE	Cardiff	Soesoe	Arr. Mar. 3
CYMBELINE	Penarth	Constant'ple	P. Oitavos, Feb. 28
CZAR NICOLAI II.	Hamburg	Batoum	L. Const'iple, Feb. 26
DAGHESTAN	Batoum	Antwerp	Arr. Feb. 27
DAKOTAH	Hong Kong	San Francisco	Arr. Feb. 22
DELAWARE	Belfast	Philadelphia	Arr. Mar. 5
DEUTSCHLAND	Rotterdam	New York	P. Prawle Pt., Mar. 3
DIAMANT	New York	Swinemunde	L. Feb. 22
ELAX	Singapore	—	L. Feb. 16
ELISE MARIE	Stettin	New York	L. Tyne, Mar. 3
ENERGIE	Tyne	New York	Arr. Mar. 3
ERIVAN	Port Arthur (Texas)	Antwerp	P. Cape Henry, Feb. 19
EUPLECTELA	Hamburg	Philadelphia	Arr. Mar. 1
EXCELSIOR	New York	Hamburg	Arr. Feb. 21
EZIO	—	—	Coasting Peru
FRANCE MARIE	Philadelphia	Marseilles	P. Del. Break., Mar. 1
GEESTEMUNDE	Tyne	Philadelphia	P. Butt of Lewis, Feb. 23
GENESSE	Manchester	Philadelphia	Arr. Mar. 5
GEORGIAN PRINCE	Tyne	Havana	Arr. Feb. 21
GOLDMOUTH	Cardiff	Batoum	L. Mar. 5
GRAF STROGANOF	Cronstadt	Odessa	In Tyne, Jan. 10
GUT HEIL	New York	Havana	L. Feb. 13
HAINAUT (Dch. shp.)	Smyrna	Antwerp	Arr. Feb. 23
HARRY WADSWORTH	Port Arthur (Texas)	Birkenhead	L. Newport News, Feb. 18
HELIOS	Trieste	Constanti'ple	L. Fiume, Feb. 20
HOTHAM NEWTON	Philadelphia	Flushing	P. Reedy Island, Feb. 20
HOUSATONIC	Newcastle (N.S.W.)	SanFrancisco	L. Jan. 31
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Naples	Novorossisk	L. Const'ple, Mar. 1
J. B. AUG. KESSLER	Port Arthur (Texas)	Thameshaven	Arr. Mar. 5
JAMES BRAND	Port Arthur (Texas)	Dover	P. Cape Henry, Feb. 23
KURA	Penarth	Philadelphia	Arr. Feb. 28
LA CAMPINE	New York	Antwerp	Arr. Feb. 25
LA FLANDRE	Ghent	Philadelphia	Arr. Mar. 5
LA HESBAYE	Antwerp	Batoum	P. Gibraltar, Mar. 2
LA MADALEINE	Antwerp	Marseilles	L. Feb. 23
LA VIGUESA	Marcus Hook	Vigo	Arr. Nov. 6
LACKAWANNA	London	Philadelphia	Arr. Mar. 4
LE COQ	Port de Bouc	Marcus Hook	Arr. Feb. 23
LOUTSCH	Barcelona	Novorossisk	L. Barcelona, Feb. 25
LUCERNA	Hamburg	Tyne	Arr. Mar. 6
LUCIFER	Newport	New York	Arr. Feb 21
LUCIGEN	Tyne	Batoum	P. Dover, Mar. 4
LUCILINE	Dunkirk	Batoum	P. Prawle Pt., Mar. 4
LUMEN	Bergen	Tyne	Arr. Jan. 12
LUX	Rouen	Novorossisk	L. Const'ple, Feb. 26
MAKKAVEI	—	Batoum	Arr. Feb. 20
MANHATTAN	Rotterdam	New York	Sp. Feb. 26, 49 N. 16 W.
MANNHEIM	Rotterdam	New York	Sp. Feb. 27, 15 N. 9 W.
MARGARETHA	London & Newport	Manzanilla	Off Barry Island, Feb. 1
MEXICAN PRINCE	Tyne	Cienfuegos	Arr. Feb. 4
MIRA	Newport	New York	P. Barry Island, Mar. 3
MUREX	Palembang	—	L. Feb. 20
NARRAGANSETT	Tyne	New York	Arr. Mar. 7
NERITE	Palembang	—	L. Mar. 1
NEW YORK	New York	Southampton	L. Mar. 3
OCEAN	Hamburg	Philadelphia	L. Tyne, Feb. 27
ORANJE PRINCE	Ensenada de Mota	—	L. Feb. 25
ORIFLAMME	Rouen	Philadelphia	Arr. Mar. 4
OSCEOLA	Norfolk	Bluefields	P. Cape Henry, Feb. 17
OTTAWA	Marcus Hook	Vera Cruz	L. Galveston, Feb. 19
OURAL	Port Arthur (Texas) and Rouen	Antwerp	Arr. Mar. 3
PALEMBANG	Bangkok	Palembang	L. Jan. 10
PAULA	Tyne	New York	P. Dunnet Hd., Feb. 27
PECTAN	Thameshaven	Shoreham	Arr. Mar. 5
PENNOIL	Rotterdam	Tyne	L. Mar. 6
PERLAK	Hong Kong	Palembang	L. Jan. 20
PETROLEUM	—	Gibraltar	Arr. Dec. 18
PHOEBUS	Hamburg	New York	Arr. Mar. 6
PINNA	Manchester	Cardiff	Arr. Mar. 2
POTOMAC	Avonmouth	New York	Arr. Mar. 2
PROMETHEUS	Rotterdam	New York	Arr. Feb. 26
PRUDENTIA	Port Talbot	Kustendje	P. Tarifa, Mar. 4
RION	Tyne	Port Arthur (Texas)	P. Prawle Pt., Feb. 10

Vessel.	From.	For.	Latest Date and Position.
ROCK LIGHT	Port Arthur (Texas)	Barrow	Arr. Mar. 2
ROSSIJA	Novorossisk	—	L. Mar. 1
ROTTERDAM	New York ..	Rotterdam ..	L. Mar. 7
RUSSIAN PRINCE	New York ..	Havana	Arr. Feb. 12
SALAHADJI	Singapore ..	Sanga Sanga	L. Jan. 21
SEMINOLE........	Philadelphia	Calcutta	Arr. Feb. 7
SILVERLIP	Tyne	Port Arthur (Texas)	L. Feb. 24
SINGU	Bombay	Rangoon ..	Arr. Feb. 5
SNOWFLAKE	Philadelphia	Hull........	Arr. Mar. 4
SOPHIE	Venice	Messina	L. Feb. 6
SPONDILUS	Cardiff......	Singapore ..	L. Suez, Feb. 19
STANDARD	Tyne	Philadelphia	P. Dunnet Head, Mar. 1
STROMBUS	Singapore ..	Dover	P. Cape St. Francis, Feb. 7
SURAM	Newport	Batoum	P. Sagres, Feb. 27
SUWANEE	Barrow	New York ..	L. Feb. 28
SVIET	Alexandria..	Odessa	Arr. Feb. 16
TELENA	Singapore ..	—	L. Feb. 13
TEREK............	Manchester	Philadelphia	Arr. Feb. 24
TIFLIS............	Philadelphia	Cette	P. Gibraltar, Mar. 4
TIOGA	Batoum	Liverpool ..	Arr. Nov. 25
TONAWANDA	New York ..	Kurrachee ..	P. Aden, Mar. 7
TROCAS	Singapore ..	Palembang..	Arr. Feb. 27
TURBO	Cardiff	Philadelphia	P. Barry Island, Mar. 7
TUSCARORA......	New York ..	Calcutta	L. Feb. 23
TWINGONE	Rangoon....	Madras	Arr. Feb. 13
VEDRA	Philadelphia	Flushing....	Off I. of W., Mar. 5
VILLE DE DIEPPE	Philadelphia	Rouen......	P. Del. Break., Feb. 4
VILLE DE DOUAI	Calais......	Dunkirk ..	L. Jan. 28
VOLUTE	Yokohama ..	—	L. Feb. 28
WEEHAWKEN	London	Sumatra	L. Colombo, Feb. 1
WILLKOMMEN ..	New York ..	Stettin......	Arr. Mar. 3
WINNEBAGO (Late KINSMAN)	Bombay	SanFrancisco	P. Galle, Feb. 10

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

March 9th, 1906.

Refined petroleum is unaltered in price, latest importers' quotations being as follows:—

Russian 5⅞d.; American, 6⅛d.; Water White, 7⅝d.; and Roumanian, 5⅞d.

LUBRICATING OILS.

The following are the latest quotations:—

American pale, £7 15s. to £9 10s.

American dark cylinder, from £7 10s.

American filtered cylinder, from £11.

Shellene, £5.

TURPENTINE.

American turpentine was weak during the week, being quoted as low as 46s. 6d., but has recovered again, and is now firm at 47s. 6d. for Spot.

LIVERPOOL OIL MARKET.

March 8th.

Refined oils are quiet, but sellers now quote 6½d. for Russian and 6⅝d. per gallon for American.

PETROLEUM SPIRIT continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

NEW YORK, March 8th.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

PHILADELPHIA, March 8th.

Standard White is quoted at 7·55.

RUSSIA.

BAKU, March 6th.

The petroleum market is firm. Bebe-Aibat light crude oil is sold for future delivery at 25¼ copecs per pood. The Transcaucasian Railway has purchased 12,000,000 poods of Bebe-Aibat crude for delivery in tank waggons at Baku in course of a year at 27 copecs per pood. Kerosene in ships has been sold at 28¾ copecs.

ASTRAKHAN, March 6th.

Sellers are now quoting Residuals 34-35 copecs per pood at Astrakhan, and at other Volga ports according to distance.

BELGIUM.

ANTWERP, March 3rd.

The petroleum market is unchanged. Price of Standard White, spot, March, 19¾ francs; April-May, 20 francs.

GERMANY.

HAMBURG, March 3rd.

The kerosene market is weak. The price of American Standard White is 7·10 marks per 50 kilos.

ROUMANIA.

March 3rd.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs. ...	3·35-3·40
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery ...	3·00- —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural...	20-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octro tax of 12 fcs. per 100 kilos

PRICES FOR EXPORT.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
„ sp. gr. 0·720-0·725	8·00- 9·00
„ sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

BOMBAY, February 17th.

There has been no change in prices of Burma oils since our last report, but the tendency is firmer.

American, "Snowflake," 150 deg.	Rs.	6	0	2
„ Chester, 125 deg.		4	8	2
„ Monkey Brand, 125 deg.		4	2	2
Russian, "Anchor," 125 deg.		4	14	6
„ "White Camelia" brand, 125 deg. ..		4	0	2
„ "Rising Sun," bulk, in local made tins ..		3	14	0
„ "Elephant" brand, in local made tins ..		3	10	0
„ Bulk, in Bombay Bazaar, 125 deg. per 10 gallons..		3	3	0
Borneo oil in bulk		2	14	0
Burma Oil, in bulk, per 8 imperial gallons		2	11	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

FOR THE WEEK ENDED MARCH 6th, 1906.

Specially prepared for
this Journal by . . .
the Custom House.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Feb. 28	London	Ragosine and Co.	Plover	120 brls.	Lub.	5,190	Hamburg
Mar. 1	,,	London Oil Storage Co.	Portia	69 pks.	,,	1,920	,,
,, 1	,,	A. Brown and Co.	Albatross	100 brls.	,,	4,000	,,
,, 1	,,	T. H. Lee	Plover	74 brls.	Lub. Gr,	3,450	,,
,, 1	,,	Lunham and Moore	North Poiht	201 brls.	Lub.	8,080	Philadelphia
,, 1	,,	Shell Transport Co.	J. B. A. Kessler	Bulk	Gas	969,000	Port Arthur
,, 2	,,	Asiatic Petroleum Co.	Strombus	Bulk	Pet. Spirit	1,519,000	Pulo Samboe
,, 2	,,	Schliemann's Oil Co.	Eagle Point	60 brls.	Lub.	2,400	Philadelphia
,, 2	,,	Worthington and Boler	North Point	115 brls.	,,	4,600	,,
,, 2	,,	Felton and Crepin	City of Lohdon	10 brls.	Pet. Spirit	410	Brussels
,, 3	,,	T. Palmer	Portia	9 brls.	Lub. Gr.	370	Hamburg
,, 3	,,	A. Brown and Co.	Albatross	200 brls.	Lub.	8,000	,,
,, 3	,,	Ragosine and Co.	North Point	100 brls.	,,	4,200	Philadelphia
,, 3	,,	Vacuum Oil Co.	,,	120 brls.	,,	4,800	,,
,, 3	,,	Lunham and Moore	,,	201 brls.	,,	8,080	,,
,, 3	,,	Schliemann's Oil Co.	,,	179 brls.	,,	9,760	,,
,, 3	,,	Vacuum Oil Co.	America	510 brls. 60 ½-brls.	,,	21,600	New York
,, 5	,,	Produce Brokers	Matlekovits	150 brls.	,,	6,000	Fiume
,, 5	,,	J. Harrison	Clapton	6 brls.	,,	240	Antwerp
,, 5	,,	Anglo-American Oil Co	Narth Point	500 brls.	Min. Colz.	20,000	Philadelphia
,, 5	,,	,,	,,	2625 brls.	Lub.	105,000	,,
,, 5	,	T. H. Lee	Starling	40 cases	Pet. Spirit	320	Rotterdam
,, 6	,,	Escombe, McGrath and Co.	Albatross	10 brls.	Lub,	480	Hamburg
,, 6	,,	Burt, Boulton and Haywood	Alchymist	Bulk	Creosote	85,000	Salzeate
,, 6	,,	Vacuum Oil Co.	Artois	11 pks.	Lub.	420	Rouen
,, 6	,,	H. Finkler and Co.	Matlekevits	150 brls.	,,	6,250	Fiume
,, 6	,,	Shell Transport Co.	James Brand	Bulk	Fuel	1,159,770	Port Arthur
,, 1	Liverpool	Meade-King, Robinson and Co.	Dagbjorg	2000 brls.	Pet. Spirit	84,740	Rotterdam
,, 1	,,	Wakefield and Co.	Nyroca	24 brls.	Lub. Gr.	980	Antwerp
,, 2	,,	W. B. Dick and Co.	Haverford	370 brls.	Lub.	15,680	Philadelphia
,, 2	,,	Worthington and Boler	,,	135 brls.	,,	5,400	,,
,, 2	,,	Meade-King, Robinson and Co.	,,	1340 brls.	,,	53,600	,,
,, 2	,,	Jas. Light & Son	Quernmore	420 brls.	,,	16,800	Baltimore
,, 3	,,	G. B. Taylor	Haverford	1855 brls.	,,	74,200	Philadelphia
,, 3	,,	Crew, Levick Co.	,,	1254 brls.	,,	52,670	,,
,, 5	,,	A. Hopps & Sons	,,	370 brls.	,,	14,800	,,
,, 5	,,	,,	,,	223 brls.	Min. Colz.	4,920	,,
,, 5	,,	Liverpool Warehousing Co.	Templemore	60 brls.	M.Lub.	2,400	Baltimore
,, 5	,,	E. H. Kellogg and Co.	Umbria	50 brls.	,,	2,000	New York
,, 6	,,	Sharp and Co.	,,	5 brls.	,,	250	,,
,, 6	,,	Liverpool Storage Co.	Bovic	120 brls.	,,	4,800	,,
,, 6	,,	G. B. Taylor	,,	2090 brls.	,,	83,600	,,
,, 6	,,	Liverpool Warehousing Co.	Templemore	60 brls.	,,	2,400	Baltimore
,, 6	,,	Pickford's Ltd.	Rhineland	36 pks.	,,	750	Hamburg
,, 6	,,	J. T. Fletcher and Co.	Moorhen	8 brls.	,,	310	Antwerp

DIESEL OIL ENGINES.

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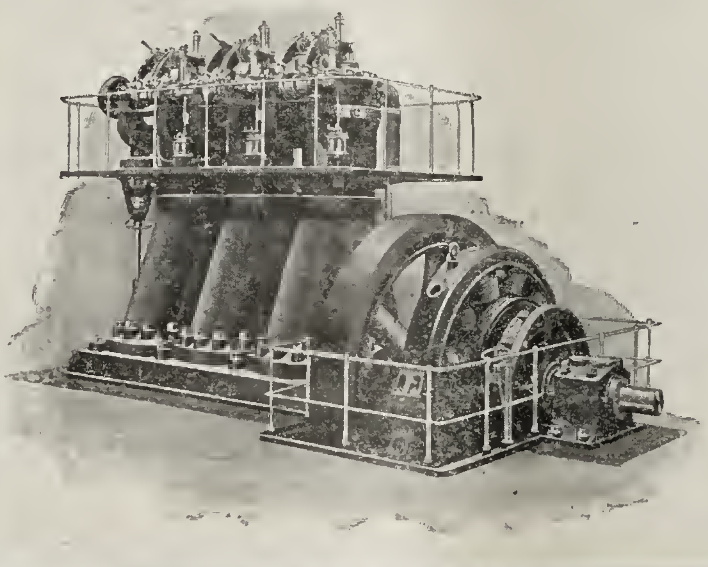

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PACKED IN SEALED TWO GALLON CANS

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IN USE AND FOR SALE EVERYWHERE.

QUALITY TELLS.

To Dealers only.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Feb. 28	Bristol	H. R. James and Son	Brooklyn City	415 brls.	M.Lub.	16,200	New York
,, 28	,,	,,	,,	60 brls.	Min. Colz	2,400	,,
Mar. 2	,,	Western Petroleum Co.	Kura	Bulk	Lamp	6,330	Trieste
,, 2	,,	,,	Suram	Bulk	,,	5,170	Batoum
,, 2	,,	H. Pritchard and Co	City of Cologne	12 brls.	Lub.	500	Hamburg
,, 2	,,	Pickford, Ltd.	,, ,,	62 pks.	,,	1,000	,,
,, 2	Grimsby	J. Sutcliffe and Sons	Ashton	40 brls.	,,	1,650	Antwerp
,, 2	Hartlepool	Hartlepool Steam Navigation Co	Malta	20 brls.	,,	800	Hamburg
,, 2	Barrow	Burnup and McDougal	Rocklight	Bulk	Fuel	577,110	Port Arthur
,, 1	Hull	W. Gillyott and Co.	Yeddo	37 brls.	Lub.	1,480	Riga
,, 1	,,	Helmsing & Sons	,,	200 brls.	,,	8,000	,,
,, 1	,,	T. Wilson, Sons and Co.	Juno	6 brls.	,,	240	Hamburg
,, 1	,,	,,	Brnuo	62 brls.	,,	2,480	,,
,, 1	,,	,,	Otto	16 brls.	,,	640	Antwerp
,, 1	,,	Hull & Netherlands Steamship Co.	Swallow	90 brls.	Tar oil	3,600	Rotterdam
,, 1	Manchester	General Petroleum Co.	Rocklight	Bulk	Gas	309,370	Port Arthur
,, 1	,,	,,	Pinna	Bulk	Lamp	490,000	Philadelphia
,, 1	,,	J. T. Fletcher and Co.	Fulmar	47 pks.	Lub.	880	Antwerp
,, 1	,,	Bramwell, Fern, and Co.	Tintoretto	99 brls.	,,	2,960	New York
,, 1	,,	G. B. Taylor	Terence	12 bls.	,,	480	,,
,, 3	,,	Donald Currie and Co.	Westmoreland	44 brls.	,,	1,900	Hamburg
,, 3	,,	Colledge Rays and Co.	,,	75 brls.	,,	3,150	,,
,, 3	,,	C. H. Morton and Sons	,,	25 brls.	,,	1,000	,,
,, 3	,,	Livrepool Storage Co.	Tintoretto	392 brls.	,,	16,610	New York
,, 3	,,	G. B. Taylor	,,	887 brls.	,,	35,480	,,
,, 1	Newcastle	Furness, Withy and Co.	Mattawan	270 brls.	,,	10,800	,,
,, 1	,,	C. Hassell and Son	,,	1675 brls.	,,	67,000	,,
,, 5	Aberdeen	Meade-King, Robinson and Co.	Tantallon	350 steel brls.	Naph.	17,500	Rotterdam
,, 1	Glasgow	Donaldson Bros	Parthenia	60 brls.	Min. Colz.	2,400	Baltimore
,, 1	,,	,,	,,	61 brls.	Lub.	2,540	,,
,, 2	,,	Anchor Line	Ethiopia	872 brls.	,,	34,880	New York
,, 1	Grangemouth	J. Currie and Co.	Coburg	4 brls.	,,	160	Hamburg
,, 1	,,	W. G. Yooll and Co.	,,	100 brls.	Lamp	4,000	,,
,, 1	Leith	,,	Coblenz	50 brls.	,,	2,130	,,
,, 1	,,	J. Currie and Co.	,,	15 pks.	Lub.	540	,,
					Net Total	6,010,070	

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO MARCH 6th 1906.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.
Austria	6,330	874,560	12,250	195,990	—	11,000	—	—	—	—	—	—	—	—	18,580	1,092,550
Belgium	—	240	4,700	92,880	—	11,000	—	—	410	2,030	—	—	—	1,416	5,110	96,566
Borneo	—	—	—	—	—	—	—	—	1,519,000	1,519.000	—	—	—	—	1,519,000	1,519,000
Canada	—	—	—	8,000	—	20,000	—	—	—	—	—	—	—	—	—	28,000
Germany	6,180	710,030	35,930	375,170	—	—	—	—	—	2,320	—	—	—	4,980	42,110	1,102,500
Holland	—	—	—	160	—	—	—	—	102,560	955,130	—	98,200	3,600	10,680	106,160	1,064,170
Roumania	—	1 360,000	—	—	—	—	—	—	—	—	—	—	—	—	—	1,360,000
Russia	5,170	7,255,760	9,480	30,480	—	—	—	758,500	—	—	—	—	—	5,410	14,650	8,050,150
Sumatra, &c	—	—	—	—	—	—	—	—	—	930,000	—	—	—	—	—	930,000
U.S.A.	490,000	11,928,527	684,070	8,630,524	—	523,328	1,278,370	10,024,710	—	1,069,180	1,736,880	5,216,880	29,720	268,610	4,219,040	37,651,669
Other Countries	—	—	420	5,240	—	—	—	—	—	480	—	—	85,000	175 800	85,420	181,520
	507,680	22,129,117	746,850	9,338,444	—	565,238	1,278,370	10,783,210	2,521,970	4,478,140	1,736,880	5,315,080	118,320	466,896	6,010,070	53,076,125

PATENTS.

Applications Published in Great Britain.

Improvements in Tanks for the Purpose of Producing a Liquid free from Suspended Solids.—John Fieldhouse, Walthamstow, Essex. No. 2520 of 1905.

This relates to a tank for the mechanical separation of suspended solid matter from liquids, comprising a central collecting or distributing chamber communicating by separate conduits with the radial compartments of a outer settling chamber. (See Special description).

Improvements in or Relating to the Purification of Fats, Fat Oils, Resins, and the like.—Carl Fresenius, Hoffenbach-on-Main, Germany. No. 10387 of 1905.

This relates to a process for precipitating the emulsion produced during the purification of fat substances, resins, and other hydrocarbons, by means of an inert gas for the purpose of rendering the temperature and the pressure employed independent of each other, and enabling such low temperatures to be employed as will not be injurious to the substances treated.

Improved Manufacture of Ricinus Oil Product.—Oelwerke Stern-Sonneborn Aktiengesellschaft, of Hamburg, Germany. No. 24935 of 1905.

This relates to the manufacture of ricinus oil products, and is characterised by the oil being heated under pressure in a hermetically closed boiler or autoclave until it mixes perfectly and in any proportion with mineral oil.

Improved Manufacture of Ricinus Oil Product.—Oelwerke Aktiengesellschaft, of Hamburg, Germany. No. 24936 of 1905.

This relates to the manufacture of ricinus oil products, and is characterised by the oil being heated in a Weigel or reflux condenser, in which the liquid is vapourised, and after condensing flows back to the same place in which the vapourised liquid was formed.

* * *

We are informed that Messrs. Richard Hornsby and Sons, Ltd., of Grantham, have just added to their extensive business the manufacture of gas engines and suction gas plants, and have secured the old-established and rapidly growing business of Messrs. J. E. H. Andrew and Co., Ltd., of Stockport, makers of the well-known "Stockport" gas engines and suction plants. We understand that the chairman and managing director of Messrs. Andrews have joined the board of Messrs. Hornsby, and that Mr. Bellamy retains the management of the Stockport branch works. Grantham remains the headquarters of the enlarged business.

The Petroleum Review.

By PAUL DVORKOVITZ.

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Editorial Notes.

A Humorous Mixture.

The London County Council is bent upon doing something to gain for itself an undying fame, and for the moment it has transferred its energies from the steamboats on the river to the question of petroleum, which subject has always a particular interest for amateur legislators. It is now urging upon the Home Secretary the importance of giving effect to the recommendations of the Select Committee on Petroleum by raising the flash-point of petroleum, and as specially indicating the necessity for this amendment, the Council comments at length upon the accident which occurred a few months ago at Cornhill when a motor waggon laden with motor spirit took fire. We are aware of the efforts made in the past as to the abolition of the present flash-point, and we likewise recollect the importance attached to the outbreak of fire upon the said motor waggon, but, for the life of us, we cannot see the connecting link between the two subjects. With its superior knowledge the County Council may possibly be able to see matters in a way which is beyond the comprehension of average intelligence, but it occurs to us that if a further restriction of the transport of petroleum and its products is aimed at, the industry should have a voice in the subject. Few industries, indeed, there are, which are hampered so much by unnecessarily drastic restrictions as is the petroleum trade, and if some of the members of the London County Council have their own way, we doubt not that the transport of petroleum through our thoroughfares, will be fraught with almost unsurmountable difficulties. Surely the large distributors of oil might with advantage take action, and so see that their interests are not further jeopardised.

A Blow to the Russian Industry.

The Baku section of the Imperial Russian Technical Society has expressed its views in a most unmistakable manner upon the taxation of petroleum oils other than illuminating oils, which scheme comes into force in Russia on the 1st of April. The members have come to the conclusion that the effect of the tax will be disastrous not only to the petroleum trade, but also to many other branches of Russian industry. Moreover, it is clear to their mind that the Government cannot possibly realise by it a revenue of 2,000,000 to 2,500,000 roubles per annum as they estimate, but merely some few hundred thousand roubles. The harm which the application of the new law will inflict upon the industry will be very great, and, *inter alia*, the manufacture of lubricating oils which have not yet established themselves firmly on the market, will decline. Machinery will be oiled with residuals, and consequently will be affected most prejudicially. The residuals which will come on the market after this law has come into force will be adulterated, and therefore their consumption will substantially decrease, from which shipping, railways, and manufacturing industries will suffer. The new law also places formalities and regulations, unjustified from the scientific or practical point of view, all tending to ruin the industry, which is already in a seriously shaken condition. In view of this, the members of the section have requested their central section at St. Petersburg to make representations at the proper quarters with a view to the abolition of this law. We have all along argued that the new law was most unjustifiable, and it is to be hoped that the agitation against its adoption will be successful, or the best interests of the industry will suffer.

A Year's Exports from Austria-Hungary.

The Austria-Hungarian petroleum export trade is in a very healthy condition, and the figures for the past year show a decided advance upon the records of all previous years. When compared with those of 1904, an increase of over 70,000 tons is noted, and this is accounted for by increased exports to France, Germany, and England. Germany, of course, is the largest customer, taking considerably more than one-half the total exports, but the figures which are shewn in a table appearing elsewhere in this issue cannot be taken as representing the exact consumption of Austria-Hungarian petroleum products in Germany, for the simple reason that quite a large portion of the oils exported to Hamburg are destined for either Holland or Belgium. But, in spite of this fact, Germany's consumption is constantly increasing, especially in regard to the use of illuminating oil. The exports of benzine, on the other hand, shew a decline by 5,520 tons, and for the past year only amount to 8,000 tons. The explanation of this is to be found, firstly, in the increased consumption of benzine in Austria-Hungary for motor purposes and, secondly, in the smaller yield of benzine from Boryslaw crude oil. A satisfactory increase is, however, to be seen in the export of lubricating oils, and this, together with the illuminating oil trade, speaks volumes for the all-round healthy nature of Austria-Hungary's export trade.

The American Fields in February.

Though exact figures of the production of the American fields for February are still wanting, it is easy to see that the month has been productive of no great results. The output of the Texas territories still continues to decline, the district of Humble being most prominent in this respect, but on the other hand, Jennings is making rapid headway, and its production is soaring upward. The reports from the high grade districts of Pensylvania are by no means encouraging. The deep sand tests in

Ohio have unfortunately not come up to expectations, and after a not inconsiderable amount of drilling, enthusiasm is dying and new work is scarce. Weather conditions have considerably interfered with the completion of many wells, and with the advent of spring, one may look to the completion of work long delayed, but to predict activity in the Pensylvanian fields during the next few months in the ratio of the past few years would be idle, the field operations having dropped to a point where only a revival can occur after frequent upward flights of the markets. News from the mid-continent fields is certainly of a more re-assuring nature. There is great activity in the various districts, the only drawback apparently being the lack of adequate storage accommodation. The daily average of quantities put into the tankage of the Prairie Oil and Gas Co. during February works out at nearly 30,000 barrels. The completion of the connections with the Whiting refinery, however, are already having an effect in the Kansas-Indian Territory field, for deliveries are daily increasing.

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BAKU AVERAGE PRICES IN JANUARY.

The average prices of petroleum products at Baku in January, according to the deals officially recorded on the Baku Oil Exchange, were :—

	Copecs per pood.
Light crude oil in Black City	20·6
,, ,, ,, at Balakhany	20·1
Residuals in ships	23·6
Kerosene in Waggons	23·6

The cost of pumping crude oil from the oil fields to the Black City refineries having increased by one-quarter copec per pood, the quotation of crude oil at Balakhany will be always one-half copec less than at Black City.

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PRODUCTION OF THE PRINCIPAL ROUMANIAN FIRMS IN JANUARY.

According to preliminary statistics which have come to hand, the output of the principal producing companies in Roumania in January was as under :—

	Tons.
Steaua Romana—	
Bustenari	9,915
Campina	5,770
Baicoi	111
Other Fieids	429
	16,225
Bustenari Co...	10,045
Telega Oil Co.	3,299
International Co., Bustenari	2,464
Hagienof and Campeanu	1,633
Romano-American Co.	1,222
Grigorescu and Vladescu	993
Arnheemsche Petroleum Co.	1,121
A. Van de Werk	443
Seceleanu Bros.	759
Aquila Franco-Romana	622
Colombia Co...	870
Guiglescu and Stanescu	691

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LATEST DETAILS OF BAKU PRODUCTION.

The total production of crude oil at the Baku oilfields during the first 15 days of February amounted to 14,880,609 poods, of which 5,230,153 poods were produced at Bebe-Aibat. The whole output was obtained by baling, there having been no spouters.

PETROLEUM DEPOSITS IN WEST AFRICA.

At an extraordinary meeting of the shareholders of the Nigeria and West Africa Development Syndicate on Thursday, the chairman, Mr. George Macdonald, said that having been pretty well assured that they had a bituminous deposit with a petroleum basis on their properties, he made investigations with regard to oils, and from the refined material, he had been able to obtain six products. The first was an oil which is equal to the best lighting oil used. The second oil was called the intermediate burning oil, of not such a good quality. The third was a lubricating oil, from which, upon a second distillation, was obtained a product known in the marketable world as vaseline, which was a form of paraffin wax. From this third lubricating oil 5 per cent. of a composition of a vaseline nature was obtained.

The consumption of kerosene alone in the British West African colonies was now something like 1,500,000 gallons a year, and that was mostly imported from America. There was a further use for oil, and that was as liquid fuel. Personally, he believed, that it was going to play a great part in the future of West Africa. It would help the mining industry if they could give them a cheaper fuel, and would be the means of opening up one, at least, of the West African colonies, Lagos, which was really in want of something to put new life into it.

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THE BATOUM PETROLEUM EXPORT TRADE IN JANUARY.

The exports of petroleum oils from Batoum in January, as well as arrivals from Batoum, were very small, more particularly the latter, which did not exceed 252,000 poods, so that the exports, even in the very stagnant condition of the trade, exceeded the arrivals by more than a million poods. Only three or four firms were receiving oils from Baku, and even some of the larger firms did not receive any oil in January for want of available supplies at Baku. The following are the figures of the turnover of petroleum products in Batoum in January (in thousand poods) :—

	Arrivals.	Exports.	Stocks on 1st Feb. (o.s.)
Refined Kerosene	24	1,000	1,220
Solor Oil	40	1,264	266
Kerosene Distillate	—	—	43
Machine Oil	106	45	192
Spindle Oil	3	—	23
Cylinder Oil	2	3	6
Lubricating Oil Distillate	18	—	46
Residuals	58	29	197
Other Products	1	—	5
Total..	252	1,264	1,998

The whole of the kerosene came from Baku in tank waggons, as the pipe line was not working the whole month. Even deliveries by rail only commenced in the second part of the month after the railway was cleared and repaired. Under these conditions the exports to various countries were distributed in an abnormal way. The exports to England amounted to 588,000 poods, or only 28 per cent. of the normal quantity; to France, only 28,000 poods; Austria, 63,000 poods; Spain, 41,000 poods. To Alexandria was shipped 300,000 poods for packing in cases.

The Closing of the Batoum Case Oil Works.

(Continued from page 184.)

After a time Batoum began to attract large numbers of Georgians and Armenians. More capable and intelligent than the Turks, they gradually expelled the latter from all the skilled branches of work, reducing them to the state of mere labourers. These new labour elements were not satisfied with the pay and conditions of life which suited the Turks, and this fact, together with the abnormal conditions of employment at the Batoum case factories, of which we have already spoken, paved the way for troubles which were not long in coming.

Such was the state of affairs in the Batoum case oil trade right up to February, 1902. In the preceding year exports had reached the record figure of nearly 15,000,000 cases. The reaction came early in 1902, when, under the influence of the competition of the Standard Oil Co., the orders from India fell off to a large extent, and the Bnito Co. announced that they would close part of their works, involving the dismissal of 400 men who had for many years been employed. In the olden times the men used to take such decisions quietly, and resign themselves to their fate, until an improvement in the trade again gave them a chance of employment. This time, however, the men protested and made proposals to the company, among which was one that all the men should be retained at the works, but should work in turns, those working should receive full pay, and those not working should receive half-pay. Some of the men demanded at least one month's pay as compensation on being discharged. The company, however, declined to pay for work that was not done, and all the men, about a thousand in number, came out on strike.

The one thing needed at this critical moment was the appearance of an impartial and authoritative mediator who would have brought about peace by mutual concessions. Instead, the Military Governor of the Province came up, declared the strike illegal, and arrested a number of the men, whom he accused of instigating the trouble. This caused great excitement among the men, who arranged a demonstration and marched to the prison, demanding the release of their comrades or their own imprisonment. The Governor accepted the latter alternative, and arrested all the workmen. The agitation spread to the rest of the townspeople, excited crowds appeared in the streets, who, failing to disperse at the order of the authorities, were fired upon by the troops, and the first blood was shed at Batoum.

These events produced a most depressing effect everywhere, for they came as a complete surprise. The Bnito works were closed, and the majority of the workmen left for their homes in the districts nearest Batoum. The strike occasioned much talk in the town. Some spoke of the oppression of the men by the manufacturers, the numerous deductions and fines imposed, which reduced the earnings of some of the men by half; others accused the men of unreasonableness, in demanding pay for work that was not done; whilst there were some who ascribed the strike to purely political motives. It is certain, however, that on that occasion the strike was of a purely economic nature, as proved by the fact that work at the Mantascheff and other case factories proceeded regularly and without interruption, and even the Bnito Co. continued to load cases out of their stocks. Moreover, even after the events related above, the men were not averse to come to terms with the company, and after four months an agreement was reached, and for the first time the workmen proved the victors. The rate for piece work was increased, some of the regulations distasteful to the men were abolished, and the men were also partly paid for the time they were on strike.

This first success inspired the men with confidence in their own power, and urged them to further action toward improving their material condition either by voluntary agreements with the masters, or by strikes. Strikes now became the order of the day at Batoum, and broke out periodically at one factory or another, or at several at a time, and from the case factories spread also to the wharves, seriously hindering the loading and unloading of cases and other goods. The men were thoroughly united among themselves, whilst the case manufacturers and other employers of labour were divided, and as a result had to constantly give way, and when any one firm attempted to make a stand and temporarily closed its works, they made matters worse for themselves, as in the end they were compelled to reopen their works and also to pay the men for the time of the strike. A point was, however, reached when no further concessions could be granted, and the works had to close.

For the success of the Batoum case factories three essential things were needed:—the manufacture of good strong tins and cases, easy and convenient transportation to the ships, and careful and proper packing in the holds of the steamer. Practically the only requirement put forward by buyers was the delivery of a strong clean case containing an oil of a certain flash-point. To attain these objects the manufacturers needed the co-operation of the Government, the municipality of Batoum, and of the workmen. Unfortunately, such harmonious cooperation was never known at Batoum.

The case factories at Batoum are situated in the western part of the town, which was to form the projected petroleum town, a scheme that is still awaiting realisation. This town was to include, apart from the petroleum installations, other kinds of buildings and free spaces for special purposes.

Some 25 years ago, the whole of this territory represented a swamp, with here and there rice and maize fields. With the occupation of the district by Russia, the swamp was drained, and when the construction of the Baku-Batoum Railway was commenced, there was a great scramble for plots of land at Batoum. Among the many buyers of land was one, A. N. Tairoff, former contractor of the postal service on the

Erivan road, who had made much money on contracts in the Russo-Turkish war. Mr. Tairoff bought two of the best plots of land obtainable—one in the centre of the town, where he erected a whole block of buildings and a Hotel Imperial, which is still considered the finest building at Batoum, and another with the enormous area of about 2,450,000 square feet. The latter was purchased by him from the Turkish landowners who emigrated to Turkey, at about 1¼ copecs per square foot. This same land was leased to Mantascheff and other firms for the building of case factories at an annual rental of from 21 to 28 copecs per square foot.

On that portion of the seashore where the Bnito works are now situated, were formerly the homely huts and maize patches of the inhabitants of the village of Barzchani, who had declined to remain under Russian rule and emigrated to Turkey. The land of eight holdings was purchased from the villagers by Mr. Joudra, former superintendent of army stores, who paid about 4,000 roubles for it, and after a short time resold it to the builders of the Transcaucasian Railway, Messrs. Bunge and Palashkovsky, for about 25,000 roubles. The latter erected on it the first installation for barreling and exporting Baku kerosene and other petroleum products. The business did not long remain in the hands of the founders, for in 1886 it was taken over by the newly-formed Caspian and Black Sea Society (Bnito), with a capital of several million roubles. The new proprietors, including such capitalists as Ephrussi, Deutsch, etc., with their head office in Paris, quickly bought up petroliferous lands at Baku, and having re-constructed and extended the works at Batoum and brought them to their present size, they began to export Russian oil to all parts of the world.

In erecting the case factories, the owners endeavoured to find land which would be cheap and well situated. There were then no restrictions imposed, either by the Government or the municipal authorities, with a view to isolating the petroleum works in one locality. The result was that everybody built where he liked; the Bnito and Richner case factories were erected on the seashore, whilst all the others were at a considerable distance from the sea, and thus it came about that works containing enormous quantities of petroleum were placed right in the midst of dwelling houses and other buildings.

When the case oil trade developed to its full extent, the authorities realised the dangers involved in such a state of affairs, but found great difficulty in devising a feasible remedy. A special commission was appointed which elaborated a scheme for separating the petroleum installations at Batoum. Seven years have now passed, but nothing further has yet been done in the matter.

The above-mentioned commission give a very circumstantial description of all the case factories. The report declares that the Bnito works to be the best equipped, where manual labour is done away with entirely in all the stages of the manufacture, and even the transport of the tins into the filling sheds is done automatically by means of endless belts.

The Bnito works are scattered over four separate plots: the seashore plot to the east of the petroleum jetty; the Zolotarevsky plot by the artillery road; the Totin plot to the east of the foregoing; Kouni Dvor, on the Barzchani river to the south of the railway line. The shore plot contains the sheds for the manufacture of tins and cases and the bulk oil installations for various products other than kerosene, cooperage, timber stores and living houses. All these buildings are surrounded by a stone wall, 2,534 feet long. The area occupied by the works is about 27 acres. The following is a description of some of the more important sections of the works:—

1. A two-storeyed saw mill, 378 feet long, 87½ feet wide, and 24½ feet high. The walls are of brick, the window frames and doors are of cast-iron and wood, the roof and rafters are of iron. The floor of the first storey is of earth, and the upper floor is of wood, the latter containing 164 different benches for the manufacture of wooden cases. From the upper floor of the saw mill there are three covered transporters, by which, with the aid of endless belts, the ready cases are delivered to the packing shed. From the saw mill issues a wooden square table covered with sheet iron, and which ends in a large wooden box, and through this tube the shavings from the saw mill are driven by means of a ventilator into the box. Attached to the saw mill is an engine-room, 84 feet long, 35 feet wide, and 13½ feet high. It contains one steam engine and five boilers. The engine is of the horizontal duplex type of 250 horse-power, and a heating surface of 750 square feet.

2. The engineering department is 185½ feet long, 56 feet wide, and 16 feet high. The walls are of brick, windows and doors of cast-iron and wood, the roof and rafters of iron. This building consists of three sections—fitting shop, forge, and casting shop. The floor in fitting shop is of wood, and in the other departments of earth. The eastern part of the building contains the boiler, and is made of corrugated iron. On the south, there is an outbuilding for the smith's furnaces.

3. Three packing sheds, of which one is 235¾ feet long, 28½ feet wide, and 11¾ feet high; another is 121¾ feet long, 55¼ feet wide, and 11 feet high; and the third is 147 feet long, 27½ feet wide, and 8½ feet high. These buildings consist of roofs supported on stone pillars; the roof is of iron, the floor and rafters of wood; there are no windows or doors. Between the first two packing sheds there are two covered ways for carrying cases in a rain, and consisting of corrugated iron roofs on thin iron pillars.

4. The filling shed is 168 feet long, 126¾ feet wide, and 12½ feet high; walls of brick, windows and doors of cast-iron and wood, roof and rafters of iron, and floor of concrete. It contains 10 tin filling apparatus.

5. Four warehouses for ready packed cases of a length of 210, 126, 140 and 315 feet respectively; a width of 28, 28, 28 and 147 feet; and a height of 17½, 16⅔, 16⅓, and 17¼ feet. The walls and roofs are of corrugated iron, the windows and doors of cast and wrought iron, paved floors. There are covered ways leading from the packing shed to the warehouses, and consisting of corrugated iron roofs on thin iron pillars.

6. Separate soldering shed for tins, 163¾ feet long, 28 feet wide, and 16¾ feet high; walls, roof and rafters of wrought and cast-iron, windows and doors of wrought and cast-iron, floor of concrete. It contains 37 soldering ovens.

(To be continued.)

MEETING OF THE BAKU PETROLEUM ASSOCIATION.

A general meeting of the members of the Petroleum Association was opened on March 2nd, and concluded its sittings three days later. At the first sitting it was resolved to raise the levy on the producers for the common needs of the industry from one-fifth to one-half copec per pood. This increase is explained by the deficits of the common fund, which have reached several hundreds of thousands of roubles, and by the additional expenditure in maintaining the police at the oil fields and refineries, consequent upon the August riots.

At the second sitting on March 3rd, the Government scheme to create a separate administrative district for Baku, the refineries and the oil fields, under a special governor, was considered. The annual cost of such administration is estimated at 1,091,000 roubles, of which sum the petroleum producers are asked to contribute 565,000 roubles; the municipality of Baku, 89,000 roubles; and the balance to be provided by the Government.

The project gave rise to animated discussions. The council of the association made a counter proposal involving a contribution of 422,000 roubles. The representative of the Viceroy of the Caucasus insisted upon the schemes being adopted in its full extent, urging that any cutting down would result in half measures which would fail to achieve the purpose aimed at. The meeting deferred their decision until the following sitting. A great divergence of views was manifested on the question of the composition of the Governor's Council. The Government scheme proposes that such council shall consist of six Government officials, three representatives of the municipality of Baku, five representatives of the Petroleum Association, and three representatives of the workmen, and also that in the event of any Armenians being elected on the council, an equal number of Mahomedans shall also be elected.

The meeting declared itself against any national restrictions.

At the third sitting on the 5th of March the question of the contribution of the Association to the maintainance of the police was fixed at 565,000 roubles per annum on the condition that the scheme of the administrative reorganisation shall be carried out in full this year, the Association reserving for itself the right to make representations a year in advance in regard to any proposed changes in the number of police.

In regard to the composition of the Governor's Council it was resolved that whilst the principle of the undesirability of any restrictions of nationality is reaffirmed, they agree that these restrictions shall be adopted temporarily for one year.

A report was submitted by Messrs. Gouchman, Elin and Lianozoff on the question of the imposition of excise duty on lubricating oils. The discussions on this subject, in which Mr. Latkin, representative of the Revenue Department, participated, made clear that (1) there are no technical methods for an exact identification of lubricating oils from residuals; (2) the methods prescribed by the official instructions are complicated, inconvenient and inconclusive in their results; to collect a tax on 5,000,000 poods of lubricating oils, 350,000,000 poods of residuals will be subject to control; (3) the sale of solar oil, which is used for oil engines, will cease entirely, as it will be replaced by crude oil, and the sale of machine oil will decline by one-half, and the Government instead of getting 3,000,000 roubles will barely collect 1,000,000 roubles; and (4) the revenue of 1,000,000 roubles does not justify the many great damages which will be inflicted on industry and shipping.

The meeting resolved to petition the Government to abolish the duty, and requested the Viceroy to support their request.

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THE USE OF VACUUM PUMPS FOR OIL AND GAS RAISING.

AN INTERESTING LEGAL QUESTION.

An important question touching the vital welfare of the Indiana natural gas and oil fields, and bearing upon other petroleum developments, is to be fought in the courts in Indiana, for a suit has been instituted by the Ilo Oil Co. against the Indiana Natural Gas and Oil Co., which asks for a perpetual injunction against the defendant company using suction pumps to draw the gas from the territory as affecting the rights of the plaintiff and many other operators. Damages are asked in such sums as the plaintiff can shew to the court it is damaged, but no specific amount is mentioned.

The total absence of a statute in Indiana relative to the pumping of gas from the earth leaves the question to one of common law and personal interest. The state is without any statute on the subject.

The Ilo Co. sets forth that in operating for oil and gas in Grant county its leases cover 1,500 acres. The company has until recently had about 80 wells for the production of oil and gas, and it now has in such operation about 60 wells. The company represents that it has spent about $100,000 in developing its leases in Grant county.

The leases of the defendant company are contiguous and practically surround the plaintiff's leases. The defendant company has been operating for gas and oil in Jefferson and Fairmount townships, conveying the gas to Chicago.

The Ilo Co. claims that the defendant company in the conducting of its business has established two large pipe lines, 10 or more inches in diameter, and maintaining pumping stations in Grant, Howard and Jasper counties in forcing the gas from this field to Chicago, maintaining a great pressure on the pipe lines.

At the Fairmount pumping station there are three vacuum pumps of enormous capacity which, until January 1st, 1906, have been in use drawing the gas from the gas-bearing sand of both the plaintiff and defendant, that an unnatural and artificial suction has been maintained from five to 15 miles from the pumping station into the field drawn from. The plaintiff, prior to the use by the defendant of the suction pumps, was producing great quantities of oil daily and natural gas, the latter product being furnished to certain manufacturing establishments. It is stated in the complaint that the use of the suction pumps has greatly reduced the quantity of oil produced, and the plaintiff represents that it is no longer able to furnish gas to supply manufacturers.

Besides doing great damage to the plaintiff and every other gas and oil producer of the State, it is alleged the defendant company is menacing the very existence of the Indiana natural gas and oil fields. It is said that to compensate this great loss there is no measure of recovery.

Great interest is following the case.

THE ANGLO-CALIFORNIAN OIL SYNDICATE, LIMITED.

STATUTORY MEETING OF SHAREHOLDERS.

The statutory meeting of the shareholders of the Anglo-Californian Oil Syndicate, Ltd., was held on Monday last at Winchester House, Old Broad Street, E.C., the Chairman of the Syndicate—Mr. Magnus Mowat—presiding, the other directors present being Messrs. E. Lungley Bentley, John Chapman, H. H. Keddell, and W. Shyvers. The company's technical adviser—Sir Boverton Redwood—was also in attendance.

The Secretary—Mr. H. J. Hardy—having read the notice convening the meeting and also the report of the auditors,

The Chairman made a number of interesting remarks concerning the operations of the company up to the present time. He said that inasmuch as that meeting was simply called to comply with the Joint Stock Companies Acts, and no resolutions would be submitted, he thought the opportunity was a favourable one to mention what had taken place since the Syndicate went to allotment. The share capital was over applied for without their having to advertise in the newspapers, and they had now over 200 influential shareholders, many of whom were largely interested in the petroleum trade. One of their first duties had been to appoint a local committee, and he had only to mention the names to shew that they had the right men in the right place. They were Mr. W. J. Packard, of Lompoc, who was a member of the directorate; Mr. W. Sudden, the President of the Bank of Lompoc; and Mr. Leslie Comyn, of Messrs. Bowring and Co., of San Francisco—one of the leading firms in California.

The speaker then went on to refer to the situation of the Syndicate's property, and mentioned that it was only six miles from Lompoc, and afterwards stated that on the advice of Sir Boverton Redwood, the well-known authority on petroleum, and their own technical expert, they had engaged Mr. William Sutton, who had had considerable experience in selecting sites for oil wells, and superintending the drilling of the same in various parts of the world. Mr. Sutton had proceeded to the Packard ranch, and arrived there two months ago. In conjunction with Mr. A. S. Cooper, the local mining engineer and petrologist, whose report was issued with the prospectus, and with the approval of the local committee, they had selected the 1,500 acres of land purchased by them out of the Packard estate. So far the committee had sent to London various maps and suggestions, which, with the assistance of Sir Boverton Redwood, had already enabled the directors to decide upon the site for the first two wells.

The Chairman then pointed out the property of the syndicate, which was indicated by being coloured green upon a map. He also showed that the property formed part of a ranch of 9,000 acres, and the two first wells were south of the anticline, which ran from east to west. The wells which they were to drill were likely to be of considerable depth, and the local committee informed them that it might be four months before they struck the oil-bearing sands. The boring would be done by the Syndicate, and not by employing contractors. As to the value of their property, he needed only to mention that it was surrounded by the oil wells of the Union Oil Co., one of the largest and most successful concerns in California. That the oil trade in the State of California had gone up by leaps and bounds was evident from the production, which had risen from 4,300,000 barrels in 1900 to 35,000,000 barrels in 1905. Most of the railways in California, the industries, as well as the steam vessels (other than ocean going), had gone over from coal to the use of crude oil, the latter giving double the burning power of the former, whilst the saving in space was also a most important element. In road making in the Pacific States, crude oil and asphalt were now extensively used. As Sir Boverton Redwood was in the room, he had no doubt that he would wish to say a word or two upon the Syndicate's properties, which could not fail to interest the shareholders. He therefore called upon Sir Boverton Redwood to make a few remarks.

Sir Boverton Redwood, in complying with the chairman's wish to make a few remarks to the shareholders, said:—I have only to say that I view the future of this property with perfect complacency, and I am most hopeful of the issue of the work in which you are engaged. As the Chairman has pointed out, there is ample room for the employment of additional capital in participating in the development of the already very great oil production of California. I think that in this tract which is indicated in green, on the map on the wall, you have a piece of territory which ought to give you excellent results on drilling. (Applause.) The land has been carefully selected, in view of the existence of those conditions which we know to be essential to success in work of this kind.

Unfortunately none of us can look beneath the surface of the ground, and say precisely what conditions are awaiting the test of the drill, but we are enabled in these days to take advantage of the experience which has been gradually accumulated, and which was not at the disposal of those pioneers in the petroleum industry. The Chairman has told you that two sites have been selected for the initial wells. We hope that those wells will prove to be highly productive. They will certainly give us a knowledge of the depth at which the oil strata are to be found on this portion of the territory, and cannot fail to be very instructive as to the future work of development.

We cannot, until we have carried out a certain amount of drilling, precisely determine the depth to which we shall have to bore. These first two wells, therefore, will be watched with great care by Mr. Sutton, an experienced man who is looking after your interests, and who will from time to time furnish the board with information as to the progress of the work.

We know that through this portion of the territory which has been selected for your Company's operations — these 1,500 acres — there runs what geologists call an anticlinal—that is, a fold in the strata such as we know to be essential to success, because it is in these anticlinal folds that the oil accumulates, and in putting down these two wells we are seeking to prove the character of the two ends of this anticlinal. In the light of the knowledge afforded by the results of these wells, we shall be enabled to map out a programme for future work, so that in the course of time it will be possible to indicate with considerable precision the localities for future wells, and the depths to which we shall have to drill in order to reach the oil-bearing formation. At present all we can say is that with the help of the scientific knowledge based upon past experience, your directors have made very careful choice first of the territory your company has acquired, and secondly of the sites of these two wells, and it only remains for us to await the results of the drilling operations about to be commenced with full confidence as to the character of those results. (Applause.)

A Shareholder inquired as to whether, when the oil would be struck, it would be of the heavy character usually associated with Californian oil wells, and in reply thereto,

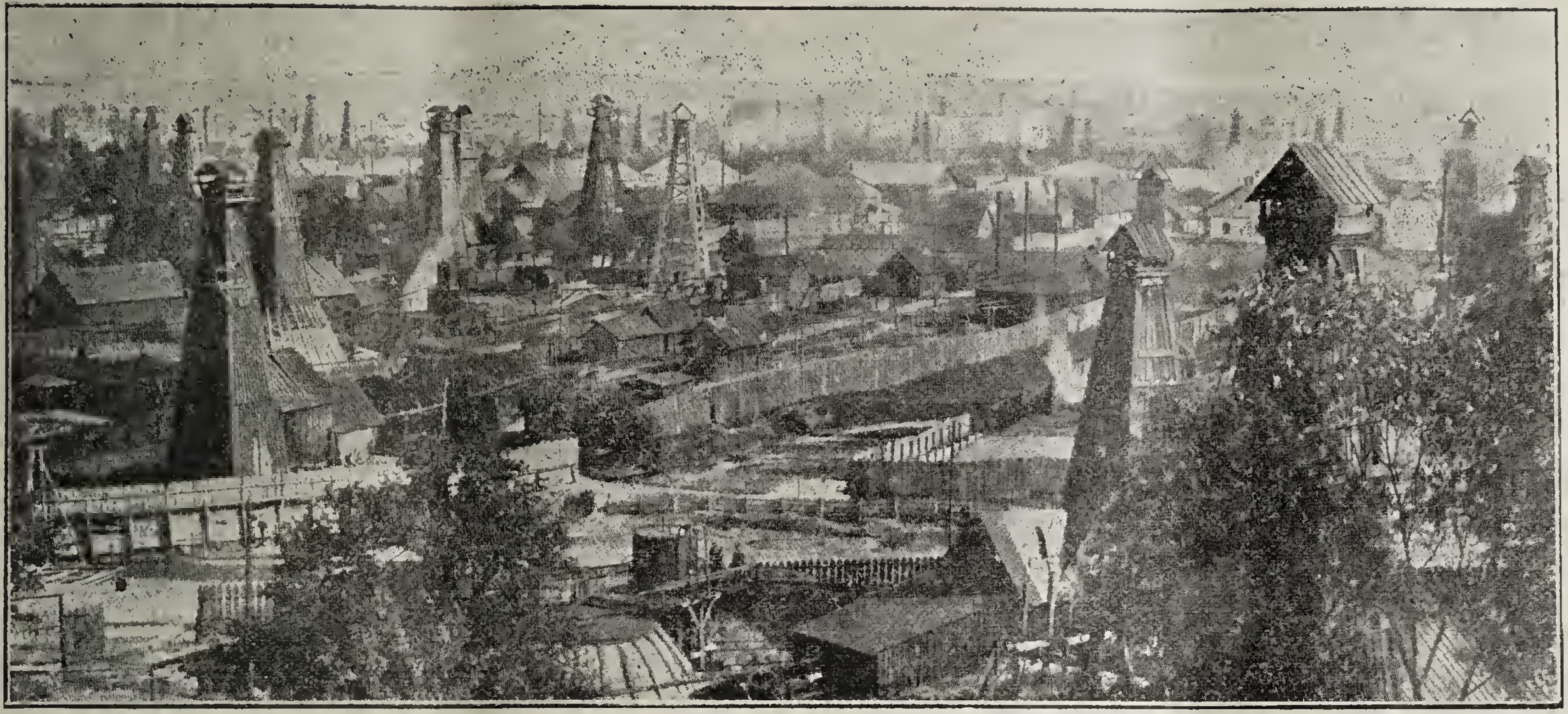
Sir Boverton Redwood said that he knew of wells near by that were yielding oil that could not be called heavy oil. It might be that they would find two different grades of oil at different depths, but he certainly considered there was very good prospects of their striking oil on their properties which could not be classed as heavy oil.

On the motion of Mr. Hilken a vote of thanks was proposed to the chairman for his interesting *resumé* and also for his conduct in the chair, and this, being seconded by Mr. Gill, was carried with unanimity, the chairman briefly responding.

The meeting then concluded.

IMPORTANT NEWS FROM GALICIA.

We learn that many boring contractors and producers are leaving the Debra and Potok district of the Boryslaw field, which was formerly so rich in oil. The properties in the northern part of the Boryslaw field have never yielded any great production, nor did the wells on the north-western end of Boryslaw shew any great productivity. The most important announcement, however, is that Mr. MacGarvey has ordered the stoppage of operations on all the wells of the Galizische Karpathen Petroleum A.G. at Potok and Debra, with the exception of Nos. 30, 39 and 52 at Potok and No. 37 at Debra.



A Part of the Boryslaw Field Where Operations Are Being Abandoned.

THE BAKU RUSSIAN PETROLEUM CO.

A BATCH OF RESIGNATIONS.

The agitation against the present management of the Baku Russian Petroleum Co. is already bearing fruit, for within the past few days, Mr. Leslie and Mr. Stuart Hogg, members of the board of that concern, have tendered their resignations, while Messrs. France, Fenwick and Co., the managers, have also resigned.

BATOUM PETROLEUM SHIPMENTS.

The shipments of petroleum products during the week ended March 10th, from Batoum were as under (in thousand poods): —

	Illuminating oil.		Other products.	
	1905.	1906.	1905.	1906.
To Europe ..	262	—	152	106
To the East ..	1	2	—	—
To Russian Ports	—	127	—	6
From Jan. 1st to Mar. 10th:—				
To Europe ..	2,915	955	1,065	585
To the East ..	2,509	631	80	—
To Russian Ports	636	767,000	—	27

AN OIL TANKER TO THE RESCUE.

We have had many instances of the meritorious work performed in mid ocean by those in charge of oil tankers, and another instance is forthcoming in the details which reach us of the foundering of the Phœnix liner, "British King," off Nova Scotia. The oil tanker "Mannheim" rendered timely assistance, and succeeded in rescuing over a dozen persons.

PETROLEUM TRADE BETWEEN AUSTRIA AND HUNGARY.

Last year there were imported from Austria into Hungary 26,200 tons of petroleum products, while, on the other hand, Hungary sent to Austria 10,700 tons of such products, thus shewing a difference in favour of Austria of 15,500 tons of a net value of about 3,000,000 kronen. It is interesting to note that at times when there is no refiners' cartel, the Austrian exports to Hungary are much larger. For instance, in 1901 they were treble the imports from Hungary into Austria. This circumstance will be of importance in the event of a customs separation between Austria and Hungary. Such separation would adversely affect the exports of crude oil to Hungary, which in 1904 amounted to 200,000 tons.

THE BAKU-BATOUM PIPE LINE.

According to a telegram from Tiflis, dated the 11th inst., the repair of the Michaelovo-Batoum section of the pipe line has been affected, and kerosene has now begun to be pumped direct from Baku to Batoum. The military Chief of the Transcaucasian railway has proposed to the superintendents of sections to pump oil chiefly in day time, and to exercise the greatest vigilance in the guarding of the line and tanks by day and by night.

CASUALTIES TO PETROLEUM VESSELS.

BULYSSES (s.).—*Cuxhaven*, March 19th, 6 p.m.—The British steamer Bulysses lost anchor and 90 fathoms chain in the roads.

STROMBUS (s.).—*St. Catherine's Point*, March 29th, 5.33 p.m.—Signalled:—"Machinery out of order; high pressure piston packing ring broken."

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{11}{16}$-$\frac{13}{16}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	2/9-3/3
,, ,, ..	£650,000 5½% Pref.	£1	6/6-7/0
Bibi-Eybat Petroleum Co. ..			10/6-11/6
Californian Oilfields	£250,000 Ord.	£1	6½-6¾
European Petroleum.. ..	£550,000 Pref.	£1	3/0-4/0
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	82-85
Russian Pet. & Liquid Fuel ..	£500,000 6½% Pref.	£1	11/6-12/6
,, ,, ...	£600,000 Ord.	£1	12/0-13/0
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	3½-3¾
,, ,, ...	£575,000 Ord.	£1	9/6-10/6
Shell Transport & Trading ..	£2,000,000	£1	24/0-25/0
,, ,, ,, ..	£1,000,000 Pref.	£10	9⅜-9⅝
Spies Petroleum Company ..	£312,500	10s.	6/9-7/3

SCOTCH COMPANIES.

Supplied by Messrs. Maclean and Henderson, Stirling.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. 8½ pd	£199,750	£10	17¼
Do. 6% Cum. Pref. ..	£100,000	£10	12⅛
Burmah Oil, Ord.	£1,100,000	£1	55s. 9d.
Do. Pref.	£250 000	£1	26s. 0d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	8½
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	18
Do. New (£8 10s. pd.)	£131,750	£10	16¼
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	82s. 3d.
Do. 6% Cum. Pref.	£100,000	£10	12⅞
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	30s. 0d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	65s 9d.
Do. "B" Deb...	£150,000	£100	148

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on March 12th. Lowest Roubles.	Quotations on March 12th. Highest Roubles.
Baku Naphtha Co.	100	530	534
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	4,050	4,100
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	169	171
Neft Co.	250	—	—
Nobel Bros.	5,000	8,950	9,050
,, ,, ...	250	445	450
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	89	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

DUTCH COMPANIES.

Company.	Quotations March 14th.	Quotations March 5th.	Florins.
Arnhemsche Petroleum Mij. ..	80	80	1,000
Dordtsche Petroleum Mij. (Pref.) ..	125¾	126	500
,, ,, ,, (Deb. 4½%)	102¾	102¾	1,000
Elzasser Petroleum Mij.	2¼	2⅛	1,000
Gaboes ,, ,, ...	19¾	19¾	—
Holl. Rumeensche Petroleum Mij...	27	25$\frac{11}{16}$	1,000
Int. Rum. Pet. Mij.	89	89	500
Java Petroleum Mij...	30	30	1,000
Koninklyke Nederl. Pet. Mij. Shares	485–488	481–484	250-1,000
,, ,, Share certificates	488½–489½	480½	1,000
Mœara Enim Petroleum Mij. ..	115	114¾–115¾	100
,, ,, 1-1,000 Oblig. 5	102	102	250-1,0
"Moesi Ilir" Petroleum Mij. ..	35½	35½	—
Nederl.-Rumeensche Petroleum Mij.	16	14	
Nieuwe Ned. Petroleum Mij. And...	55¼	55¼	1,00000
Oliebronnen in Hannover Mij. ..	175	173	—
Panolan Maatschappij Cert. ..	340	340	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	141	138½	1,000
,, ,, (Common) ..	95	93	—
Sumatra-Palembang Petroleum Mij	61½–61¾	60	500

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 15th March, 1906, as follows:—

In the past week the tin plate market has become completely demoralised, sales of oil plates having been made at the prices indicated below, chiefly for American account. It seems clear that makers cannot continue selling at these prices very long unless raw materials come down (and there is not much indication for relief in that direction at present), as they undoubtedly mean a very serious loss at to-day's prices of steel, tin, and other materials; it therefore seems inevitable that there will be further stoppages of tin-plate mills to bring the supply more into line with demand.

IC	18¾ × 14	124 sheets	110 lbs.	12/6 per box.
IC	19¼ × 14	120 ,,	110 ,,	12/9 ,,
IC	20 × 10	225 ,,	156 ,,	17/9 ,,

F.o.b. Wales. Tin lining and iron hooping extra.

◆

To make up for lost time railway pipe line between Baku and Batoum is now working day and night delivering kerosene.

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Spies Petroleum Co., Ltd.—The output for the week ended March 11th was 123,440 poods, or 1,990 tons.

Baku Russian Petroleum Co., Ltd.—The production for the week ended March 11th was 302,000 poods, or 4,870 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended March 11th was 259,000 poods, or 4,177 tons.

The European Petroleum Co., Ltd.—The production for the week ended March 11th, 1906, was 91,079 poods, or 1,468 tons.

◆

Tyne Imports.—The Tyne Commission's analysis of imports for the past year shew that during the twelve months 27,045 tons of mineral oils were landed in the Tyne, this amount being a decrease of 7,646 tons when compared with the figures for the preceding year. During the year 9,288 tons of benzine were imported, this quantity being a decrease of 450 tons against the figures of the previous year.

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Saturday, March 17th, 1906.

THE VOICE OF PROTEST.

To the credit of English investors, be it said, they are at last determined to make themselves heard in regard to the management of the companies in which their investments lie, and following upon the agitation which has been and is being waged against the present conduct of the Russian Petroleum and Liquid Fuel Co., and also the Baku Russian Petroleum Co., a strong protest has been raised by an important shareholding interest in the Anglo-Russian Petroleum Co. against the methods adopted by the present management of that concern.

By this time, we have no doubt, our readers will be familiar with our views upon the question of the conduct of public companies. We have for some years condemned the unbusinesslike methods which have been displayed by not a few of the directors upon various petroleum companies. Knowing, as we do, that in the vast majority of cases, the money of investors is practically left to take care of itself—that is, of course, after promoters and sundry other rapacious pockets have been filled—for it is an open secret that an intimate knowledge of the petroleum industry is one of the least qualifications for a position as a director upon operating concerns—it has been apparent to us that if the petroleum industry is to progress upon those successful lines which it certainly ought to follow then the air should be cleared of much that is very unpleasant.

Deplorable as it is, it nevertheless remains a fact that the petroleum industry as an investment has, for the time being, been killed in the eyes of the British investor, not because it offers no inducement for good returns, but solely because as a result of unscrupulous manipulations among certain sets of petroleum company promoters and directors, the great hope of success which should always be prominent in honestly conducted enterprises has had to lie subservient to personal aggrandisement and self gain.

Had we made such a statement as this a few months ago, the hands of many shareholders would have gone up in holy horror, for until the recent disclosures in connection with the Russian Petroleum and Liquid Fuel Co. and the Baku Petroleum Co., the directors and promoters had jointly managed to exercise hypnotic influence over the shareholders to such an extent that, although it was seen things were going from bad to worse, a feeling of the greatest confidence existed between the one section and the other. But, since that time, things have greatly changed. The shareholders are no longer content to waive all claims for a return from their investment; they prefer to look at the matter in the light of reason and ask themselves, "Why have we waited so long?" The seats of the directors of petroleum companies, at all events, are no longer the happy thrones of those who know not that there is a limit to the patience of shareholders: battle has been declared, and the general body of the investors—we don't single out those of any particular company—are eager for the fray.

We have borne a foremost part in the agitation which has fortunately been successful in bringing about this change in the attitude of directors to shareholders and *vice-versa*, and to us it is very pleasurable to find that the movement for reform is now in other quarters being so energetically pushed forward.

In the case of the Anglo-Russian Petroleum Co., a shareholding interest, representing about 50,000 shares, is now bent upon bringing a new order of things into being, and in a circular which has been issued a few days ago, the signatories not only plainly make their protest against mismanagement, but are agitating for the removal of the incompetent management, and the fusion of new blood in its place. So far as we are aware, the movement bids fair to meet with great success, for the patience of the shareholders has been tried to a most unreasonable degree. We only trust that everyone will disabuse their minds that the attempt is one to ventilate personal grievances in the agitation. We have recently seen how easy it is for directors to persuade the shareholders into the belief that attacks and protests such as those already commenced, have been made with ulterior motives in view; but we have no fear as to the ultimate outcome. The tide has turned, and as time goes on, the current is bound to become the stronger. Nor can anything but good result for the holders of stocks. They have been silent for too long a period, and if only they had uttered a strong voice of protest years ago, the damage which the petroleum industry in general has received would not have been so great, nor would the idea to-day be prevalent that the industry does not afford a sound investment.

But while new protests are being raised from the shareholders of other petroleum concerns, those which received great prominence and leapt into public favour a few months ago are steadily gaining ground. During the present week the shareholders of the Baku Russian Petroleum Co. have received additional proofs of the necessity for reform, for a stronger condemnation of a directorate in the eyes of a common-sense public can scarcely be imagined than that which is contained in the circular, the purport of which appears elsewhere in this issue. The Investigation Committee, which was appointed toward the end of the year, came to certain conclusions with which everyone who has studied the question will agree, and they themselves recognise that a move must be made to place the company upon a better basis.

The only question therefore upon which there appears to be any division is as to who shall carry out this spirit of reform. The directors have without doubt forfeited all confidence, and so it remains for the shareholders to work out their own salvation. That in the end all will come right is to our mind a foregone conclusion. A feeling of enthusiasm for reform is spreading throughout the provinces, and during the coming week various meetings are to be held in order that the shareholders may be fully acquainted with the facts of the case. Thus we are now within easy distance of the time when the voice of protest shall reap its well-earned reward, and when the shareholders in Anglo-Russian petroleum companies will receive a return for their investments which will be some compensation for lost opportunities.

LONDON OIL SHARE MARKET.

Friday, March 16th.

The paucity of business and consequent stagnation of the Oil Share Group on the London Stock Exchange upon which we commented in our last issue has, unfortunately, not been improved upon by the current week's dealings, for although a good many shares have changed hands, it is the outcome of selling orders, and the market is, in consequence, considerably weaker, although there are few actual changes in quotations to record.

Last Saturday prices were as follows:—Anglo-Russian Oil $\frac{1}{16}$-$\frac{1}{8}$, Assam Oil $\frac{5}{8}$-$\frac{7}{8}$, Baku Ordinary 3s. to 3s. 6d., Preference 6s. 9d. to 7s. 3d., Bibi-Eybats $\frac{1}{2}$-$\frac{5}{8}$, Debentures 88-93, Californian Oilfields 6$\frac{1}{2}$-6$\frac{3}{4}$, Californian Refineries $\frac{3}{8}$-$\frac{5}{8}$, European Preference $\frac{1}{8}$-$\frac{1}{4}$, Debentures 81-86, Russian Ordinary 12s. to 13s., Preference 12s. to 13s., Debentures 87-90, Schibaieff Ordinary 10s. 3d. to 10s. 9d. Preference 3$\frac{3}{8}$-3$\frac{5}{8}$, Shell Transport Ordinary 24s. 6d. to 25s., Preference 9$\frac{1}{4}$-9$\frac{3}{4}$, and Spies $\frac{5}{16}$-$\frac{3}{8}$.

On Monday, although dealing took place in Russian Ordinary and Preference and Spies, no alterations were recorded, but on Tuesday Russian Ordinary was very flat at 10s. 6d. to 11s. 6d., thus registering a fall of 1s. 6d. per share; and Schibaieff Ordinary shared a similar fate at 9s. to 10s., with a decline of 1s. 3d. Baku Ordinary, although on offer, was absorbed by subsequent buyers, and the price remained unaltered.

Wednesday and Thursday's transactions were not of sufficient importance to change prices, and to-day's are given in full on page 208.

The Baku Russian Petroleum Company, Limited.

IMPORTANT CIRCULARS TO SHAREHOLDERS.

A number of circulars have been received by the shareholders of the Baku Russian Petroleum Co., Ltd., during the present week, bearing upon the agitation directed against the mismanagement of the company which has so long been tolerated by the shareholders.

The circulars are very explicit, and put the case of the necessity for reform strongly before the investors. It is pointed out the report of the Investigation Committee makes the following disclosures:—

That the actual sum paid to the vendors was £848,000, and that £334,000 was the gross promotion profit.

That Mr. Gladstone's firm received £103,500 out of this profit, of which £21,500 was their share of the £43,000 paid to the syndicate managers.

That Mr. Gladstone and his firm had sold or parted with 35,123 shares.

That the working capital of £50,000 was wholly inadequate.

That owing to the insufficient working capital the refineries had to be sold.

That it was a serious error to surrender to the Russian Petroleum Co. the entire control of the company's output.

That 2½ per cent. commission was paid to Mr. Gladstone's firm in respect of the greater part of the oil exported under the contract with the Russian Petroleum Co.

That for the year 1905 the directors had drawn their full remuneration at the rate of £4,000 a year for the first three quarters ended 30th September.

That it is necessary to place the management, both in London and Baku, permanently on a more economical and independent basis.

That the business of the company has been conducted without adequate knowledge, without sufficient working capital, and with working expenses based upon the hopes of large profits, which have never been realised.

That it is necessary to place the company upon a better financial basis; and

Finally, that there is conclusive evidence to the effect that the company still possesses valuable oil-bearing properties.

The circular then proceeds to state that notwithstanding these findings, the Investigation Committee suggest that this very board of directors should be entrusted with the re-organisation of the company, aided by the advice of the Sub-Committee.

Sir A. C. C. de Renzy, Dr. Whitty, and Dr. Dvorkovitz, who have jointly issued the circular, consider such an arrangement would be disastrous to the company. They have no reason to think that the directors would be more successful in their future management of the company's affairs than they have been in the past. Moreover, inasmuch as the re-organisation of the company necessarily involves financial considerations, the fact that the majority of the members of the Sub-Committee are on the boards of various financial corporations demonstrates that their interest in any scheme of re-organisation might be opposed to those of the shareholders of the company.

They have therefore decided to call an extraordinary general meeting with the object of removing the present directors and replacing them by a small board of directors, who will as soon as practicable take the necessary steps to constitute a new board, which will include at least two representatives for Yorkshire and Lancashire (these counties holding more than half the shares). The new directors will be gentlemen who have practical knowledge and experience of the oil industry, and are not connected with financial and trust corporations.

INDEPENDENT MANAGEMENT.

The appendix which accompanies the circular states that with regard to Baku, it has been admitted over and over again that it is necessary for the welfare of the company that the management there should be entirely independent, and the board have been very severely criticised by the shareholders for employing as general manager one who was associated with the sister company (The Russian Petroleum and Liquid Fuel Co.), and yet when the late manager resigned, instead of having an independent manager, the board appointed as his substitute one who is manager, not only of the Russian Petroleum and Liquid Fuel Co., but also the Schibaieff Co. and the Bibi Eybat Petroleum Co., etc.

It should be remembered that this company's production has to be sold in the open market, and it is absolutely against the interests of the company that the realisation of the same should be in the hands of a gentleman who represents two other companies largely interested in buying crude oil for their refineries.

THE OLD AND NEW MANAGEMENT CONTRASTED.

The chairman, proceeds the appendix, on a recent occasion gave the shareholders the impression that under the new management the prospects of the company were improving, but what are the facts as shown by the company's accounts and official statistics?

From 1900 until the change in management the production steadily increased, and since the change it has steadily decreased.

That until the end of 1903 the company received the full average market price for its production, and has never done so since the change.

The following figures confirm these statements:—

	Production. Tons.	Average Market Price.	Net Profit.	Loss.
1900	288,000	19/8=£283,200	£77,000	—
1901-2-3	390,000 per annum	9/6=£185,250	—	£28,000 per ann. or 1s. 6d. per ton.

The average cost of production therefore during the three years amounted to 11s. per ton, including £65,000 per annum depreciation.

Now we come to the results when Mr. Gladstone and the new directors secured control after the resignation of the late managing director. The production in 1904 was 423,000 tons and the average market price was 19s 8d., therefore on the above basis (viz.: costs 11s. per ton) the net profit would have been 8s. 8d. per ton = £183,300, instead of which the new board shews a loss of £51,000.

In 1905 the production was 255,000 tons and the average market price was 27s., therefore on the basis of the old management the net profit should be 16s. per ton = £204,400 net profit. Instead of this we understand there will be a loss.

But for the mismanagement at Baku the production in 1905 would have been at least 25 per cent. more. We have, however, taken the actual production as a basis for our calculations.

A WORD ABOUT PROFITS.

Now let us see, continues the appendix, what profits the company should be making this year.

The production from January 1st this year has averaged 4,600 tons per week, or say at the rate of 240,000 per annum. The average market price, 30s. 3d., less 11s. costs = 19s. 3d. per ton net profit, or equal to £230,000 per annum. The production, under proper management, should be at least 400,000 tons.

Why was the Chairman unable to give any hope of such result to the meeting on the 19th February? Simply because he knew that no sooner was your company free from the notorious contract with the Russian Company than your directors sold ahead at much below current prices some millions of poods to the very people who are associated with the Russian Co. and the Schibaieff Co.

To give you some idea of the reckless character of Mr. Gladstone's actions in marketing the oil, the writers of the appendix quote as an example the following telegrams and letters from the late managing director, Mr. Tweedy, cited by him at the meeting of the Russian Petroleum Co. on 6th December, 1905, all of which go to shew that he strongly objected to Mr. Gladstone's proposals. The telegrams and letters were sent by him to the Russian Co. in December, 1903.

The telegram sent December 12th, 1903, said :—" You are being misled, the object is to make money at the risk and expense of the company."

Three days later Mr. Tweedy forwarded the following telegram :—" As my views on vital principles are contrary to majority of board, please accept my resignation ; kindly inform Sir James Kitson what has passed, and tell him I recommend Baku Co. give notice cancel arrangement Russian Co. before 31st December."

On December 19th he wrote :—" Why should there be any objection to the managing director seeing the conditions of such an important operation if the intention of those interested is really to promote the welfare of the company ? Great men (for example, Lord Dufferin) have been misled in business affairs, but this fact did not relieve them altogether of responsibility to shareholders."

On January 2nd, 1904, Mr. Tweedy also wired :—" Would seriously counsel studying without reserve the interests of those who are promoting the scheme" (meaning, of course, Mr. Gladstone).

THE ISSUE OF DEBENTURES.

We find that the debentures already issued, amounting to £125,000, were taken up by your chairman's friends to the extent of £50,000, the remaining £75,000 being taken by Mr. Gladstone's friends, and no opportunity was given to the shareholders to subscribe. Notwithstanding the fact that these debentures afforded excellent security, they were issued at a discount of 10 per cent., and, in addition, a commission was paid to Mr. Gladstone's firm.

IMPORTANT RESOLUTIONS.

The requisition contains a number of important resolutions which it is suggested shall be passed at the extraordinary meeting to be called. These resolutions include one declaring that the existing board of the company no longer commands the confidence of the shareholders, and calling upon the members of the board to resign their offices ; extraordinary resolutions removing the members of the board ; a resolution reducing the number of directors to such number as the meeting may think proper ; another appointing such number of qualified members of the company as the meeting may think fit ; a resolution appointing such members of the company as the meeting may think proper as a temporary committee of management, with power for such committee or a majority in number of them to exercise, for such period as the meeting may determine, such of the powers vested by the articles in the board of directors as the meeting may think fit ; a resolution directing the temporary committee of management to take steps for securing the services of qualified members of the company as directors ; and lastly, that the services of Mr. Urquhart, the present manager of the company, be dispensed with forthwith, and that he be replaced by a new manager, who shall be bound to devote himself to the business of the company exclusively, and shall reside in Baku.

PETROLEUM EXPORTS FROM AUSTRIA-HUNGARY IN 1905.

The exports of petroleum products from Austria-Hungary to various countries in 1905, according to official statistics, were (in tons) :—

Destination	Illuminating Oil.	Gas Oil.	Lubricating Oil.	Benzine.	Total.	
					1905.	1904.
Germany ..	82,044	526	14,581	2,000	99,151	79,332
France	26,508	5	1,877	925	29,314	9,193
Turkey	27,510	—	95	3	27,608	8,877
Switzerland ..	8,125	220	2,758	3,781	14,885	13,935
England ..	10,312	—	2.704	—	13,016	6,779
Holland ..	509	108	7,227	—	7,844	4,382
Italy	1,702	65	2,588	1,109	5,464	4,810
Belgium ..	124	60	3,843	—	4,027	3,321
Bulgaria ..	2,627	1	23	3	2,654	921
Other Countries.	2,253	67	1,081	364	3,765	4,574
Total ..	161,714	1,052	36,777	8,185	207,728	136,124

The total exports of the different products in 1905, compared with those for the preceding year, were as follows : –

	1905.	1904.
Illuminating oil	161,714	91,500
Gas oil	1,052	2,391
Lubricating oils	36,777	28,527
Benzine	8,185	13,706
Total	207,728	136,124

It will be observed from the above that the exports in 1905 shew an increase against 1904 of 71,605 tons, or 52½ per cent. The greatest increase occurred in the export of illuminating oil, which rose by 77 per cent.

The total exports of illuminating oil to Germany during the year were 33,197 tons to Hamburg, and 48,847 tons to the rest of Germany. In 1904, the respective figures were : 10,470 tons for Hamburg, and 46,856 tons for the rest of Germany. Thus, whilst the exports of illuminating to the rest of Germany have remained practically stationary, those to Hamburg have increased threefold. A large part of the petroleum shipped to Hamburg, however, was destined for Holland and Belgium, which countries have in reality consumed more Austrian illuminating than is shewn in the above table of exports.

The exports of illuminating oil to France have also trebled, namely, from 7,887 tons in 1904, they increased to 26,508 tons in 1905. The same rate of increase has also occurred in the case of Turkey, namely, 8,831 tons in 1904 and 27,510 tons in 1905.

In addition to the above, there were exported from Austria-Hungary in 1905, 2,220 tons of unrefined paraffin scale, against 1,152 tons in 1904 ; refined paraffin scale, 6,770 tons in 1905 against 4,840 tons in 1904 ; ozokerite, 1,614 tons against 2,093 tons ; and ceresin, 831 tons against 676 tons.

The imports of petroleum products into Austria-Hungary in 1905 were :—

	Germany.	Russia.	Roumania.	U.S.A.	Other Countries.	Total	
						1905.	1904.
Crude oils ..	3	—	18,755	—	10	18,768	20,110
Refined or semi-refined oils (lubricating) ..	1,019	7,658	1,954	13,504	296	24,926	22,714
Paraffin Scale, refined - ..	37	3	—	225	31	338	472
Paraffin Scale, unrefined ..	215	—	—	186	109	549	998
Ozokerit ..	1	—	—	—	—	1	6
Ceresin ..	20	—	—	—	—	20	28

There were also imported into Austria-Hungary in 1905, 52,913 empty wooden petroleum barrels, practically all of which came from Germany. In 1904 there were imported 37,004 barrels.

The Determination of the Water Content in Petroleum Reservoirs.

Under the above heading, Mr. J. Gruszkiewicz contributes an interesting article in a recent issue of our contemporary *Naptha*. He points out that if the crude oil separates with difficulty from the water, then the somewhat generally accepted view that the water may be in a position to collect into a sort of water nest suspended in the crude oil is too far fetched and is in contradiction to the fundamental laws of nature. In such cases it must be assumed that these water nests are greatly enlarged globular drops, and these phenomena are explained by the cohesion of the particles of water, somewhat according to the Plateau phenomenon. The last-mentioned physicist has proved, in a very simple manner, the cohesion of the particles which acts in opposition to gravitation, and also to that force which impels fluids to take the lowest level. This experiment can easily be performed if olive oil of specific gravity 0·915 is poured into a mixture of alcohol and water of the same density. In such a case the oil is itself kept suspended in the mixture in globular form. The explanation lies in the fact that gravitation is arrested by the hydrostatic pressure (Archimides), wherefor the inter-molecular cohesive power in the olive oil cannot be overcome. But this phenomenon, clearly comprehended by us, does not take place under any condition if water is added to the crude oil, or if both fluids are mixed with one another. The water in the crude oil must place itself on a level, but the horizontal crude oil strata shew a different water content at different heights, just as one and the same stratum contains different quantities of water in certain intervals of time, and this because these fluids are in the condition of dynamic equipoise which condition continues longer the more dense the crude oil is. This period can be shortened by heating the crude oil, and the reservoirs—especially in Boryslaw—are furnished with steam worms. In these reservoirs the water collects on the bottom and, in proportion to the quantity of the same, is drawn off by means of a pipe, especially admitted into the bottom of the reservoir for this purpose.

The crude oil forced from the well into the reservoir is weighed in the pipe station with the water found therein, therefore after drawing the water from the reservoir a crude oil condition results which is smaller than the original amount. Thus it becomes necessary for the conduit makers and confiners to measure the water content with the reservoir. For this purpose the "Patent Water Finder" could very easily serve, as well as the apparatus recently constructed by Engineer Mittler and Dr. L. Neustadt for determining the water on the bottom of the reservoirs and in different crude oil strata. The first mentioned contrivance consists of strips of paper covered over with coloured paste and fastened on metal. By dipping the apparatus to the bottom of the reservoir the paste is dissolved by the water and the paper is coloured to the height of the position of the water. The second apparatus consists of a glass pipe inclosed in a metal cylinder and furnished with a valve on the under end. The valve opens by immersing the apparatus in the crude oil, and closes when the apparatus is upheld a while or is drawn up. By resting on the bottom of the reservoir the valve opens by means of a peg fastened to the valve and resting on the bottom of the reservoir. In this manner the glass pipe takes up that vertical stratum of crude oil which is lodged in that place. If water was in the reservoir we find the same in the glass pipe and, indeed, at the same height.

I would gladly not say a word on this subject if the two methods mentioned were really adequate. The first apparatus, although well thought out in principle, is not qualified for crude oil because the paper is highly coloured by the crude oil so that one can scarcely speak of the discovery of a difference in colour. It is not suitable for this reason, which is most important, namely, because the crude oil covers the strips of paper and so the water fails in action, upon which everything depends. That this is so we can easily convince ourselves if we dip a feather or pencil with long strips of gummed paper fastened thereupon into a glass filled half with water and half with crude oil. The paper reaching through the crude oil into the water is covered by a dark crude oil film. The crude oil clings water-tight and firmly to the paper and completely keeps it from being wet by the water. I have not observed the second apparatus in practical employment, but I do not believe that it would be suitable for crude oil and for the simple reason that one would hardly be able to find the border between the oil and water in the glass pipe, for the inner pipe is stained with the crude oil and made more or less opaque. Secondly, besides water the crude oil contains slime, which is suspended in the water, and a sufficiently accurate reading of the water position is hindered.

I would be glad to discover that the above opinions are mistaken, but if I consider beforehand that the second apparatus is scarcely suited for petroleum distillate it is very well adapted for drawing samples of crude oil from different depths for the purpose of determining the impurities by means of the methods recognised in practice.

The apparatus I introduced into practical employment consists of a glass pipe covered with a thin film of water glass (silicate of soda) which is coloured by a red aniline dye which is easily soluble in water and is insensible to the alkaline influence of the silicate of soda. The glass pipe is from 30 c. to 40 cm. high, about 8 cm. broad, and is covered within with paper or wadding for the purpose of better accentuation of the contrast in colours. The two ends of the pipe are soldered. They are fastened to an iron bar with broad base cast from lead, wherewith the apparatus, placed in the reservoir, can sink right to the bottom of the same.

At the presence of water the under part of the pipe is coloured after a few minutes. After drawing out the apparatus and wiping off the glass pipe with a woollen cloth, it is clearly seen that one part of the pipe is white, the other red. The colour border is so distinct that it can be determined to a millimetre.

Between this method and that first mentioned there is apparently no difference. However, the first serves effectively for the determination of the water content, the latter not at all. The material upon which the water has to work here plays the deciding *rôle*. I have remarked that the crude oil does not stick to a covered water glass, others say the adhesive power is less than the pressure upwards, the pipe loses its crude oil covering on entering into the water, and therefore nothing stands in the way of the action of the water on the water glass. In this case the water glass cannot be covered with paste or gum. By the employment of glass instead of paper no capillary action takes place which corresponds to the water border gathered on the glass pipe and exactly like the real. Finally a glass pipe is easily cleaned of the crude oil and can again be employed. The glass can not be replaced by any other material, for example any metal, because water glass will not adhere to the metal.

It still remains to be remarked that the time required for colouring in certain degrees depends upon whether the water glass stratum is fresh or old. In any case from five to ten minutes are sufficient.

Perhaps it will not be uninteresting if at this opportunity I sketch the method as to how one can prove water and, at the same time, the water border in wells in case the necessity for the same should arise. For this purpose small shavings of easily moistened papers are saturated with a 1 per cent. solution of phenolphtalein. After drying in the air place each strip in a sort of small receptacle which was previously covered on both sides with a solution of water glass and completely dried. In order to make the confinement closer the receptacle should be covered with beeswax or earth wax with additions of colophony or "Venetian terpentine." In this manner the phenolphtalein paper is secure from the crude oil, and in case water is present the water glass dissolves, wets the paper and dyes red the previously white paper shavings. This dye develops because the water glass combines with basic properties, and on the other side phenolphtalein in the presence of basis forms a coloured mass, in this case a soda mass. With an entire row of these prepared shavings, the same being fastened to a cable at certain intervals, inserted into the well and withdrawn after the expiration of from fifteen to twenty minutes, one cannot perceive from the colouring of the phenolphtalein strips at what depths the borders between the oil and water lie.

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CENSUS OF THE AMERICAN PETROLEUM REFINING INDUSTRY.

The Census Office at Washington has issued a brief preliminary bulletin giving the statistics for the petroleum refining industry for the quinquennial census covering the calendar year 1904, as compared with the twelfth census, which covered the year 1900. According to these figures, the total value of the products of the American industry in 1904 was $175,005,320, as compared with $123,929,384, a gain of $51,075,936. Illuminating oil shews a gain of about 8 per cent. in quantity, but the value has increased from $74,694,297 to $92,272,186, or about 25 per cent. The increase in the production of naphtha and gasolene is only about 4 per cent. in quantity, while the value has risen from $15,991,742 to $21,314,837, or nearly 50 per cent. Other products which are not enumerated have increased in value from $33,243,345 to $61,418,297, or nearly 100 per cent. The following comparative statement presents the details of the industry:—

	1900.	1904.
Illuminating Oil:—		
Barrels	25,171,289	27,588,654
Value	$74,694,297	$92,272,186
Naptha and Gasolene:—		
Barrels	5,615,554	5,811,289
Value	$15,991,742	$21,314 837
Other Products	$33,243,345	$61,418,297
Total Value	$123,929,384	$175,005,320

The census officials regard the very large proportionate increase in the value of naphtha and gasolene as the most significant feature of the report, which they ascribe to the fact that a very small proportion of the lighter distillates of petroleum are obtainable from the oil fields that have recorded the largest increase in production since the census of 1900.

AMERICAN PATENTS GRANTED.

Oil Feeding Device.—Thomas J. Kehoe, Fort Wayne, Ind.

A fountain having a series of independent leads communicating with its lower part; a series of plungers working in the leads respectively, and each plunger having means in connection therewith for admission of oil from the fountain into the corresponding lead when the plunger is in uppermost position; outlet valves arranged one in each of the leads beneath the corresponding plungers, each valve being hollow, open at its top, and closed at its lower end, and having an annular shoulder which rests against a seat in the corresponding lead, and having also a port which affords communication for the downward passage of oil within the lead when the valve is moved below its normal position; compression springs acting one against each of the valves to hold the latter in normal position, and mechanism in connection with the plungers to actuate the same.

Well Drilling Apparatus.—Ira L. Neely, Independence, Kan.

A well drilling apparatus including a foundation frame, upwardly extending posts pivoted at their lower ends to said foundation, a rod connecting the upper ends of said posts, a walking beam pivoted on said rod, means connected with one end of said walking beam for grasping the drilling cable, means for actuating said walking beam, a hand lever mounted on the foundation frame, and a connecting rod extending from said lever to the superstructure that tilts said superstructure rearward away from the well being drilled when such movement is desired.

Process of Refining Turpentine.—George O. Gilmer, New Orleans, La.

A process which consists in first separating the turpentine from the pyroligneous acid contained therein, next adding approximately 50 per cent. of pure water and distilling the mixture at a temperature above that at which the water is vaporised, condensing the vapours of distillation and allowing the liquids to settle and separate, next decanting off the water and adding to the remaining turpentine lime water, then subjecting the mixture of turpentine and lime water to an aerating and agitating process, next decanting off the lime water, and then distilling the turpentine at a temperature of approximately 335° F., by means of heat transmitted to the turpentine from a body of water upon which the turpentine is supernatent, and finally condensing the turpentine vapour.

Well-Drilling Machine.—David L. Baugher, Paola, Kansas.

A supporting frame, an oscillating shaft, a segmental arm rigid to one end thereof, and a crank arm rigid to the opposite end, a drum mounted on said shaft, a ratchet rim carried by the drum, a concave faced pulley carried by the crank arm, a yoke adapted to prevent disengagement of a rope from said pulley, a racking lever, pawls carried by the lever, said pawls adapted to alternately engage the ratchet rim.

Device for Raising Liquids from Wells.—William Richards, Mayburg, Pa.

In a device for raising oil from wells, the combination of tubing extending from the surface down to the shot-hole or oil producing stratum, a bridge axed to said tubing and located in said shot hole, there being a longitudinal hole extending through said bridge, and the upper end thereof adapted as a valve seat, and a longitudinal hole extending from the lower end of said bridge partly through the same and having a lateral opening into the shot hole, and adapted as an inlet for oil, tubing attached to the bottom of said bridge and extending downward therefrom below the oil-producing strata and adopted as a storage reservoir, a return chamber located at the bottom of said reservoir, means of conducting oil from the shot hole into said chamber, maans permitting said oil to pass into the storage reservoir, an air pipe extending from the surface of the ground down into the tubing, valves thereon adapted to seat in the bridge and in the return chamber, respectively, and adapted to permit oil to pass upwardly through the same and to prevent the return thereof.

Oil Extractor.—Henry E. Moffat, Woodstock, Canada.

An oil extractor comprising a separating chamber having inlet and outlet ports for the exhaust steam, an expansion chamber inclosing the separating chamber, oil cups within the expansion chamber opposed to the outlet ports for the separating chamber, means for breaking the vacuums in the separating and expansion chambers, and an automatically operated controlling valve for the vacuum breaking means.

Rotary for Oil Wells.—Horace D. Bernard, Beaumont, Texas.

In a pipe rotary in combination, a bed plate, a table rotatably mounted thereupon, said table and said bed plate having aligning openings through which a pipe may pass upwardly, said table having a circumferential groove, clips projecting into said groove and securing said table to said bed plate, means for locking said table against rotation, a ring rotatably mounted on said table, a bracket carried by said ring and adapted to engage a second pipe tongs attached to said pipe nearer to said table.

The American Oil Market.

New York, Week ended March 3rd.

The reports from the older producing sections have been meagre during the past week, and apparently there has been a lull in development operations. Fewer completions have been reported, and these make a very discouraging exhibit. The percentage of failures to find oil has been larger than during preceding weeks, while only a few of what may be classed as good wells are included in the list, most of the wells shewing oil being small pumpers. It is apparent that the new production falls far short of making good the decrease in the output of the older wells and further decrease in the total production results. The summary of operations during the past month shews no improvement over the results during the month preceding, and although a number of large wells have been reported which gave hope that considerable addition would be shewn to the production, they have added little, as they decreased rapidly, soon settling down to the average of the wells in the district where located. There have been a number of extensions to productive territory during the past month, says the *Oil, Paint and Drug Reporter*, and it was stated that much new work in those sections would be the result, but it appears that thus far none of these extensions has proved important, and no hopes are entertained that a pool or even prolific extensions will be established. There is little disposition to indulge in wildcat operations, and only as indications are thought to be favourable are locations made beyond what are regarded as defined limits. From the mid-continent fields the reports indicate but little slackening in development work, and the conditions there improve slowly, the stocks increasing steadily, while the deliveries shew no gain. From Texas the reports shew steady decline in production, but in Louisiana there has been an increase. Prices remain unchanged, but an effort is said to be under way on the part of some of the Texas producers to force the price to 50c., though what means they propose to employ to bring this about has not been made clear.

REFINED AND PRODUCTS.—The demand for refined for export during the past week has shewn little improvement, but the slow export movement is believed to be only temporary, as conditions abroad shew no change, the present lull being attributed to the position of the tank fleet, most of the steamers being either on the other side or en route. The engagements for export during the past week foot up about 150,000 barrels, all for shipment in bulk.

The price for barreled oil has remained steady at 7·60c. for New York loading, and at 7·55c. for Philadelphia loading. The principal foreign markets are steady. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. 3d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export have been in light request, and sales of about 50,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in light request, and sales of about 10,000 barrels are reported. Pennsylvania crude is quoted at 7·60c. in barrels.

Crude naphtha continues steady. For export, sales of about 5,000 barrels have been reported.

CLOSING QUOTATIONS.

	CRUDE.	Week ended Feb. 24. 1906.	Mar. 3. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4·70	4·70
Residuum, bbls for export	.. ..	6@6½	6@6½

CRUDE AT THE WELLS.

The quotations for oil represented by credit balances were:—

	Week ended Mar. 3. 1905.	Mar. 3. 1906.
Tiona	1·54	1·68
Pennsylvania	1·39	1·58
North Lima	0·93	0·94
South Lima	0·88	0·89
Indiana	0·88	0·89
CANADIAN OIL:		
Petrolia	1·33	1·34

REFINED—FOR EXPORT.

		Week ended Feb. 24.	Mar. 3.
Cargo Lots for export ..	per gal. ..	7·60	7·60
In bulk	.. ..	4·70	4·70
Philadelphia loading ..	.. ..	7·55	7·55

REFINED IN CASES—110 FIRE TEST.

	Week ending Feb. 24.	Mar. 3.
5,000 to 10,000	10·35	10 35
1,000 to 5,000	10·50	10·50

REFINED—JOBBING LOTS.

In barrels, pkgs. included.

		Week ended Feb. 24	Mar. 3
120 fire test, S.W. ..	per gal...	12	12
130 fire test, S.W. ..	.. ..	12½	12½
150 fire test, W.W. ..	.. ..	13	13
In bulk from tanks	.. ..	10	10
300 fire test	.. ..	12¾@13½	12¾@13½

NAPHTHA AND GASOLENE.

	Week ending Feb. 24.	Mar. 3.
Naphtha, crude, car lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	17	17

PENNSYLVANIA OIL RUNS from Feb. 23rd to Feb. 28th were:—Feb. 23rd, 58,423; Feb. 24th and 25th, 87,506; Feb. 26th, 58,470; Feb. 27th, 73,769; Feb. 28th, 65,461. For the month of January, 2,223,928.

THE DELIVERIES OF PENNSYLVANIA OIL for the same dates were:—76,413; 123,232; 78,018; 83,219; 75,356. For the month of January, 2,374,247.

CHARTERS FOR THE WEEK.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended March 2nd and from Jan. 1, were as follows:—

	Week.	Year.	1905.
Refined, barrels and bulk	161,600	1,920,800	1,474,400
Refined, cases	35,000	2,366,000	5,261,000
Crude, barrels and bulk ..	—	330,100	191,800
Crude, cases	—	65,000	30,000
Naphtha, barrels	—	57,600	114,600
Residuum, barrels ..	—	104,100	150,800
Lubricating, barrels ..	4,700	72,900	17,000
Total, barrels cde. eq. ..	267,624	4,242,578	4,537,166

CLEARANCES FOR THE WEEK.

During the week ended Mar. 2nd, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1905.
Refined	9,650,690	77,548,510	73,002,053
Crude	201,900	210,100	114,489
Naphtha	193,300	2,080,150	2,432,569
Residuum	—	—	2,744,915

EXPORT STATISTICS.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Mar. 2nd ..	13,069,487
Total from New York, from Jan. 1, 1906 ..	103,614,780
Same period last year	97,550,560
Increase	6,064,220
From United States, week ended Mar. 2nd ..	19,050,248
Total from United States, since Jan. 1, 1906	199,573,508
Same period last year	163,688,121
Increase	26,885,387

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The "Review" Shipping List.

March 15, 1906.

Specially Prepared for this Journal.

Note.—Except when otherwise stated the Vessels are Steamers.

(*The following abbreviations are used in this table:*—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Philadelphia	Sables d'Olonne	P. Reedy Island, Feb. 28
ALCHYMIST	Salzaete	London	Arr. Mar. 13
AMERICAN	Antwerp	New York	P. Lizard, Mar. 3
APPALACHEE	SanFrancisco	Shanghai	L. Honolulu, Feb. 22
APSCHERON	Venice	Batoum	L. Constanti'ple, Mar. 7
ARAL	Tyne	Philadelphia	P. Dunnet Head, Mar. 5
ARAS	Newport	Batoum	P. Gibraltar, Mar. 11
ARGYLL	Honolulu	SanFrancisco	Arr. Mar. 2
ASTRAKHAN	Philadelphia	U. Kingdom	P. Del. Break, Mar. 4
AUGUST KORFF	Bremen	New York	P. Dunnet Head, Mar. 10
AUREOLE	Tyne	Nantucket	P. Dunnet Head, Mar. 6
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Tyne	—	Off Ushant, Mar. 13
BALAKANI	Manchester	New York	P. Brow Head, Mar. 12
BATOUM	Tyne	Port Arthur (Texas)	P. Dunnet Head, Feb. 17
BAYONNE	New York	Tunis	L. Algiers, Mar. 6
BEACON LIGHT	Penarth	Philadelphia	L. Mar. 4
BEME	Rangoon	Bombay	L. Feb. 15
BLOOMFIELD	Bremerhaven	Tyne	Arr. Mar. 13
BORJOM	Alexandria	Batoum	L. Consti'ple, Mar. 7
BRILLIANT	Hamburg	Philadelphia	L. Tyne, Mar. 14
BROADMAYNE	Cette	Kustendje	L. Mar. 9
BULLMOUTH	BalekPappan	—	L. Mar. 8
BULYSSES	Kustendje	Manchester	Arr. Hamburg, Mar. 10
BURGERMEISTER PETERSEN	Stettin	New York	L. Tyne, Mar. 9
CADAGUA	—	—	In port, Bilbao, Feb. 21
CALCUTTA (Br. bq.)	Newcastle (N.S.W).	SanFrancisco	Arr. Feb. 17
CARDIUM	Singapore	Dover	P. Cove Point, Feb. 18
CAUCASIAN	London	Philadelphia	P. Prawle Pt., Mar. 12
CHARLOIS	Rotterdam	Philadelphia	L. Mar. 3
CHESAPEAKE	Tyne	Philadelphia	L. Mar. 3
CHESTER	Antwerp	Philadelphia	Arr. Mar. 6
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	BalekPappan	—	L. Singapore, Mar. 7
COWRIE	Cardiff and Soesoe	Singapore	Arr. Mar. 12
CYMBELINE	Penarth	Batoum	Arr. Mar. 11
CZAR NICOLAI II.	Novorossisk	Rouen	L. Const'iple, Mar. 9
DAGHESTAN	Batoum	Antwerp	L. Const'n'ple, Mar. 3
DAKOTAH	Hong Kong	San Francisco	Arr. Feb. 22
DELAWARE	Belfast	Philadelphia	Arr. Mar. 5
DEUTSCHLAND	Rotterdam	New York	P. Prawle Pt., Mar. 3
DIAMANT	New York	Swinemunde	L. Feb. 22
ELAX	Singapore	Melbourne	Arr. Mar. 10
ELISE MARIE	Stettin	New York	L. Tyne, Mar. 3
ENERGIE	New York	Swinemunde	L. Mar. 4
ERIVAN	Port Arthur (Texas)	Antwerp	Arr. Mar. 10
EUPLECTELA	Philadelphia	—	L. Mar. 11
EXCELSIOR	New York	Hamburg	Arr. Feb. 21
EZIO	—	—	Coasting Peru
FRANCE MARIE	Philadelphia	Marseilles	P. Del. Break., Mar. 4
GEESTEMUNDE	Tyne	Philadelphia	Arr. Mar. 11
GENESSE	Manchester	Philadelphia	Arr. Mar. 5
GEORGIAN PRINCE	Tyne	Havana	Arr. Feb. 21
GOLDMOUTH	Cardiff	Singapore	L. Mar. 12
GRAF STROGANOF	Cronstadt	Odessa	In Tyne, Jan. 10
GUT HEIL	Havana	Philadelphia	Arr. Mar. 3
HAINAUT (Dch.shp.)	Smyrna	Antwerp	Arr. Feb. 23
HARRY WADSWORTH	Port Arthur (Texas)	Birkenhead	Arr. Mar. 10
HELIOS	Trieste	Constanti'ple	L. Fiume, Feb. 20
HOTHAM NEWTON	Philadelphia	lushing	P. Reedy Island, Feb. 20
HOUSATONIC	Newcastle (N.S.W.)	SanFrancisco	Arr. Mar. 12
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Naples	Novorossisk	L. Const'ple, Mar. 1
J.B. AUG. KESSLER	Port Arthur (Texas)	Rotterdam	Arr. Mar. 7
JAMES BRAND	Port Arthur (Texas)	Thameshaven	Arr. Mar. 12
KURA	Philadelphia	Plymouth	P. Del. Break., Mar 4
LA CAMPINE	Antwerp	New York	P. Scilly, Mar. 13
LA FLANDRE	Ghent	Philadelphia	Arr. Mar. 5
LA HESBAYE	Antwerp	Batoum	P. Gibraltar, Mar. 2
LA MADALEINE	Antwerp	Leghorn	Arr. Mar. 9
LA VIGUESA	Marcus Hook	Vigo	Arr. Nov. 6
LACKAWANNA	London	Philadelphia	Arr. Mar. 4
LE COQ	Philadelphia	La Pallice	P. Reedy Island, Feb. 20
LOUTSCH	Barcelona	Novorossisk	L Const'ple, Feb. 25
LUCERNA	Tyne	Batoum	P. Dover, Mar. 14
LUCIFER	New York	Dublin	L. Mar. 2
LUCIGEN	Tyne	Batoum	P. Gibraltar, Mar. 9
LUCILINE	Dunkirk	Batoum	P. Prawle Pt., Mar. 4
LUMEN	Bergen	Tyne	Arr. Jan. 12
LUX	Novorossisk	Rouen	Arr. Malta, Mar. 10
MAKKAVEI	—	Batoum	Arr. Feb. 20
MANHATTAN	Rotterdam	New York	Arr. Mar. 13
MANNHEIM	Rotterdam	New York	In Lat. 42 N., 60 W., Mar. 11
MARGARETHA	Trieste	Philadelphia	P. Cape Spartel, Feb. 26
MEXICAN PRINCE	Tyne	Cienfuegos	Arr. Feb. 4
MIRA	Newport	New York	P. Barry Island, Mar. 3
MUREX	Shanghai	—	L. Mar. 7
NARRAGANSETT	Tyne	New York	Arr. Mar. 7
NERITE	BalekPappan	Palembang	L. Mar. 1
NEW YORK	New York	Rotterdam	L. Mar. 1
OCEAN	Hamburg	Philadelphia	L. Tyne, Feb. 27
ORANJE PRINCE	Ensenada de Mota	—	L. Feb. 25
ORIFLAMME	Rouen	Philadelphia	Arr. Mar. 4
OSCEOLA	Norfolk	Bluefields	L. Inagua, Feb. 22
OTTAWA	Marcus Hook	Vera Cruz	L. Galveston, Feb. 19
OURAL	Antwerp	Batoum	L. Mar. 8
PALEMBANG	Bangkok	Palembang	L. Jan. 10
PAULA	Tyne	New York	P. Dunnet Hd., Feb. 27
PECTAN	Thameshaven	London	Arr. Mar. 5
PENNOIL	Tyne	Philadelphia	L. Mar. 10

Vessel.	From.	For.	Latest Date and Position.
PERLAK	Hong Kong	Palembang	L. Jan. 20
PETROLEUM	—	Gibraltar	Arr. Dec. 18
PHOEBUS	New York	Hamburg	L. Mar. 8
PINNA	Manchester	Cardiff	Arr. Mar. 2
POTOMAC	New York	Tyne	L. Mar. 5
PROMETHEUS	New York	London	L. Mar. 4
PRUDENTIA	Port Talbot	Kustendje	P. Tarifa, Mar. 4
RION	Tyne	Port Arthur (Texas)	Arr. Mar. 14
ROCK LIGHT	Barrow	Constant'ple	P. Peniche, Mar. 13
ROSSIJA	Novorossisk	Rotterdam	P. Gibraltar, Mar. 10
ROTTERDAM	New York	Rotterdam	L. Mar. 7
RUSSIAN PRINCE	New York	Havana	L. Mar. 4
SALAHADJI	Singapore	Sanga Sanga	L. Jan. 21
SEMINOLE	Calcutta	Singapore	L. Feb. 17
SILVERLIP	Tyne	Port Arthur (Texas)	L. Feb. 24
SINGU	Rangoon	Cochin	Arr. Feb. 17
SNOWFLAKE	Hull	Philadelphia	L. Mar. 13
SOPHIE	Messina	Batoum	L Consti'ple, Mar. 7
SPONDILUS	Cardiff	Singapore	Arr. Mar. 12
STANDARD	Tyne	Philadelphia	P. Dunnet Head, Mar. 1
STROMBUS	Singapore	Blexen	Cd. Gravesend, Mar. 12
SURAM	Newport	Batoum	P. Const'iple, Mar. 8
SUWANEE	New York	London	L. Mar. 5
SVIET	Alexandria	Odessa	Arr. Feb. 16
TELENA	Singapore	—	L, Table Bay, Mar. 11
TEREK	Philadelphia	Manchester	P. Old Head of Kinsale, Mar. 14
TIFLIS	Cette	Novorossisk	L. Mar. 13
TIOGA	Batoum	Liverpool	Arr. Nov. 25
TONAWANDA	New York	Kurrachee	P. Aden, Mar. 7
TROCAS	Palembang	—	L. Singapore, Mar. 9
TURBO	Cardiff	Philadelphia	P. Barry Island, Mar. 7
TUSCARORA	New York	Calcutta	P. Sagres, Mar. 8
TWINGONE	Madras	Rangoon	L. Feb. 16
VEDRA	Hamburg	Tyne	Arr. Mar. 14
VILLE DE DIEPPE	Philadelphia	Rouen	P. Portland Bill, Mar. 12
VILLE DE DOUAI	Calais	Dunkirk	Arr. Feb. 1
VOLUTE	Yokohama	—	L. Feb. 28
WEEHAWKEN	London	Sumatra	L. Colombo, Feb. 1
WILLKOMMEN	Stettin	New York	P. Dunnet Hd., Mar. 14
WINNEBAGO (Late KINSMAN)	Bombay	SanFrancisco	P. Galle, Feb. 10

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

March 16th, 1906.

The price of refined petroleum is unchanged as follows:—

Russian, 5⅞d.; American, 6⅛d.; Water White, 7⅝d.; and Roumanian, 5⅞d.

LUBRICATING OILS.

The latest quotations are:—

American pale, £7 15s. to £9 10s.

American dark cylinder, from £7 10s.

American filtered cylinder, from £11.

Shellene, £5.

TURPENTINE.

American turpentine has been hovering around 47s. during the week, and, excepting for short prompt parcels, that figure may be taken to represent the Spot price.

LIVERPOOL OIL MARKET.

March 15th.

Refined oils are quiet, but sellers now quote 6½d. for Russian and 6⅝d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, March 15th.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, March 15th.

Standard White is quoted at 7·55.

RUSSIA.

Baku, March 13th.

Prices at Baku continue to advance, and crude oil is now quoted spot at 27-27½ copecs per pood; residuals for delivery during the coming navigation have been sold at 31 copecs. The market is in a very high strung condition, in view of the lack of available supplies. Residuals for delivery at Astrakhan are quoted 34 copecs, and liquid fuel for steamers is quoted 35–36 copecs. Among the leading firms, however, a tendency is already noticeable to check further advances in prices, as there is the constant fear of other kinds of fuel displacing oil.

BELGIUM.

Antwerp, March 10th.

The petroleum market is unchanged. Price of Standard White, spot, March, 19¾ francs; April-May, 20 francs.

GERMANY.

Hamburg, March 10th.

The kerosene market is weak. The price of American Standard White is 7·10 marks per 50 kilos.

ROUMANIA.

March 10th.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	3·35-3·40
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery	3·00- —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural	20-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octro tax of 12 fcs. per 100 kilos

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
„ sp. gr. 0·720-0·725	8·00- 9·00
„ sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

Bombay, February 24th.

There has been no change in prices of Burma oils since our last report, but the tendency is firmer.

American, "Snowflake," 150 deg.	Rs.	6	0	2
„ Chester, 125 deg.		4	8	2
„ Monkey Brand, 125 deg.		4	2	2
Russian, "Anchor," 125 deg.		4	14	6
„ "White Camelia" brand, 125 deg.		4	0	2
„ "Rising Sun," bulk, in local made tins		3	14	0
„ "Elephant" brand, in local made tins		3	10	0
„ Bulk, in Bombay Bazaar, 125 deg. per 10 gallons		3	3	0
Borneo oil in bulk		2	14	0
Burma Oil, in bulk, per 8 imperial gallons		2	11	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

FOR THE WEEK ENDED MARCH 13th, 1906.

Specially prepared for this Journal by . . . the Custom House.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Mar. 7	London	Anglo-American Oil Co	America	1395 brls.	Lub.	55,800	New York
,, 8	,,	T. H. Lee	Virgo	6 casks	Lub. Gr.	390	Hamburg
,, 8	,,	G. W. Sheldon and Co.	Redstart	8 casks	,,	450	Antwerp
,, 9	,,	,,	Maine	20 casks	,,	1,050	New York
,, 9	,,	Burt, Boulton and Haywood	Alchymist	Bulk	Creosote	35,000	Salzeate
,, 9	,,	W. B. Dick and Co.	Crown Point	120 brls.	Lub.	5,000	Philadelphia
,, 9	,,	Wilkins, Campbell and Co.	,,	75 brls.	,,	3,000	,,
,, 9	,,	Joseph Barber and Co.	Vesta	77 pks.	,,	1,000	Hamburg
,, 10	,,	Vacuum Oil Co.	Maine	499 pks.	,,	11,160	New York
,, 10	,,	Produce Brokers	,,	240 brls.	,,	9,600	,,
,, 10	,,	Mordaunt Bros.	Crown Point	120 brls.	,,	5,000	Philadelphia
,, 12	,,	Wilkins, Campbell and Co.	,,	15 brls.	Lub. Gr.	600	,,
,, 12	,,	Anglo-American Oil Co.	,,	1725 brls.	Lub.	69,000	,,
,, 12	,,	,,	,,	625 brls.	Min. Colz.	25,000	,,
,, 12	,,	,,	Maine	391 brls.	Lub.	15,640	New York
,, 12	,,	London Oil Storage Co.	,,	40 brls.	,,	1,600	,,
,, 12	,,	Asiatic Petroleum Co.	Strombus	51 drums	Lamp	210	Pulo Samboe
,, 12	,,	,,	,,	6 brls.	Liquid Fuel	240	,,
,, 12	,,	G. W. Sheldon and Co.	Ptarmigan	6 casks	Lub.	300	Antwerp
,, 12	,,	Vacuum Oil Co.	,,	40 brls.	,,	1,600	,,
,, 13	,,	,,	Minnehaha	1551 brls.	,,	62,040	New York
,, 13	,,	G. W. Sheldon and Co.	,,	113 pks.	,,	870	,,
,, 13	,,	London and India Docks Co.	,,	500 pks.	,,	17,500	,,
,, 7	Liverpool	J. L. Turnbull and Co.	Ivernia	20 brls.	,,	800	Boston
,, 8	,,	American Line	Haverford	35 brls.	Lub.	1,490	Philadelphia
,, 10	,,	Meade-King, Robinson and Co.	Harry Wadsworth	Bulk	Crude	686,000	Port Arthur
,, 10	,,	Cunard Steam Shipping Co.	Campania	30 brls.	Lub.	1,200	New York
,, 10	,,	Pickford's Ltd.	Anna Tiede	20 pks.	,,	370	Hamburg
,, 10	,,	A. Hopps & Sons	Indore	249 brls.	,,	9,960	Baltimore
,, 12	,,	W. Gibson and Sons	Bohemian	50 brls.	Lamp	2,050	Boston
,, 12	,,	G. B. Taylor	Cedric	85 brls.	M. Lub.	3,400	New York
,, 12	,,	W. B. Dick and Co.	Campania	40 brls.	,,	1,570	,,
,, 12	,,	Valvoline Oil Co.	,,	310 brls.	,,	12,710	,,
,, 12	,,	Co-operative Society	New Pioneer	12 bls.	,,	480	Rouen
,, 13	,,	Liverpool Storage Co.	Victorian	614 brls.	,,	24,560	New York
,, 13	,,	W. B. Dick and Co.	,,	600 brls.	,,	25,140	,,
,, 13	,,	,,	Noordland	300 brls.	,,	12,690	Philadelphia
,, 13	,,	A. Hopps and Sons	,,	500 brls.	,,	21,040	,,
,, 8	Bristol	W. Smith and Co.	Exeter City	160 brls.	Lub.	6,400	New York
,, 8	,,	,,	,,	18 brls.	Lamp	720	,,
,, 8	Hartlepool	Hartlepool Steam Navigation Co.	Merrick	30 brls.	,,	1,200	Hamburg
,, 8	Hull	T. Wilson, Sons and Co.	Cito	11 brls.	Lub.	440	,,
,, 8	,,	,,	Juno	40 brls.	,,	1,600	,,
,, 8	,,	,,	Sultan	4 brls.	,,	160	Antwerp
,, 8	,,	,,	Dynamo	8 pks.	,,	280	,,
,, 8	,,	,,	Martello	50 brls.	,,	2,000	New York
,, 8	,,	Meade-King, Robinson and Co.	Tantallon	372 steel brls.	Naph.	18,600	Rotterdam
,, 9	,,	W. Gillyott and Co.	Toronto	1256 brls.	Lub.	50,240	New York
,, 9	,,	,,	,,	250 brls.	,,	10,000	,,
,, 9	,,	T. Wilson, Sons, and Co.	,,	66 brls.	,,	2,640	,,
,, 10	,,	Anglo-American Oil Co.	Snowflake	Bulk	Lamp	970,360	Philadelphia

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To Dealers only.

DATE.	PORT INTO WHICH IMPORTED.	CONSIGNEE.	VESSEL.	PACKAGES.	DESCRIPTION OF OIL.	NUMBER OF GALLONS.	PORT WHENCE.
Mar. 8	Manchester	T. R. Coblay and Co.	Westmoreland	25 brls.	Lub.	1,000	Hamburg
,, 9	,,	W. Hodgson and Co.	Rissa	6 brls.	,,	250	Antwerp
,, 9	,,	Donald Currie and Co.	Pellworm	30 casks	,,	700	Hamburg
,, 9	Middlesbrough	J. J. Sutherland	Consul Poppé	52 brls.	,,	2,080	Antwerp
,, 8	Newcastle	Tyne-Tees Steam Shipping Co.	Grenadier	24 brls.	Tar oil	960	Rotterdam
,, 9	Glasgow	Burell and Son	Barossa	150 brls.	Lub.	6,000	Trieste
,, 9	,,	Anchor Line	Ethiopia	50 brls.	,,	2,000	New York
,, 12	,,	,,	Furnessia	972 brls.	,,	38,880	,,
,, 12	,,	,,	,,	350 brls.	Lamp	14,000	,,
,, 9	Grangemouth	W. G. Yooll and Co.	Staffa	50 brls.	,,	2,000	Hamburg
,, 8	Leith	,,	Sardinia	50 brls.	,,	2,180	,,
,, 8	,,	J. Currie and Co.	,,	21 brls.	Lub.	840	,,
,, 8	,,	,,	Weimar	65 brls.	,,	2,560	,,
,, 8	,,	,,	Vienna	10 brls.	,,	400	,,
,, 8	,,	Graham Yooll and Co.	,,	50 brls.	Lamp	2,180	,,
,, 8	,,	,,	Coblenz	50 brls.	,,	2,180	,,
,, 8	,,	J. Currie and Co.	Bude	26 pks.	Lub.	500	,,
,, 8	,,	G. Gibson and Co.	Quentin	19 brls.	,,	760	Rotterdam
,, 8	Stornoway	Carl Herlopen	Hordingso	10 brls.	Lamp	400	Tonsberg
					NET TOTAL	2,270,020	

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO MARCH 13th, 1906.

IN GALLONS.

[ALL RIGHTS RESERVED.]

COUNTRY.	ILLUMINATING.		LUBRICATING.		RESIDUALS.		GAS OIL. (Solar)		BENZINE.		FUEL OIL.		OTHER DESCRIPTIONS.		TOTALS.	
	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.
Austria ...	—	874,560	6,000	201,990	—	11,000	—	—	—	—	—	—	—	--	6,000	1,098,550
Belgium ...	—	240	5,120	98,000	—	11,000	—	—	—	2,030	—	—	—	1,416	5,120	101,686
Borneo ...	210	210	—	—	—	—	—	—	—	1,519,000	240	240	—	—	450	1,519,450
Canada ...	—	—	—	8,000	—	20,000	—	—	—	—	—	—	—	—	—	28,000
Germany ...	9,740	719,770	9,300	384,470	—	—	—	—	—	2,320	—	—	—	4,980	19,040	1,121,540
Holland ...	—	—	760	920	—	—	—	—	18,600	973,730	—	98,200	960	11,640	20,320	1,084,490
Roumania ...	—	1,360,000	—	—	—	—	—	—	—	—	—	—	—	—	—	1,360,000
Russia ...	—	7,255,760	—	30,480	—	—	—	758,500	—	—	—	—	—	5,410	—	8,050,150
Sumatra, &c	—	—	—	—	—	—	—	—	—	930,000	—	—	—	—	—	930,000
U.S.A. ...	987,130	12,915,657	485,080	9,115,604	—	523,328	—	10,024,710	—	1,069,180	686,000	5,902,880	25,000	293,610	2,183,210	39,834,879
Other Countries	400	400	480	5,720	—	—	—	—	—	480	—	—	35,000	210,800	35,880	217,400
	997,480	23,126,597	506,740	9,845,184	—	565,238	—	10,783,210	18,600	4,496,740	686,240	6,001,320	60,960	527,856	2,270,020	55,346,145

AMERICAN NOTES.

Oil for Troubled Waters.—It is reported that it took nearly 300,000 gallons of crude oil a few days ago to calm the waves that raged round the tanker "Roma" as she laboured in a heavy gale off Cape Hatteras.

The Pure Oil Company's Pipe Line.—A deal of talk is heard of the probability of the Pure Oil Co. building a pipe line to the Gulf of Mexico from the Kansas fields. The producers of Kansas have been approached in the hope of taking up a certain amount of stock, and the reports now have it that almost the prescribed amount of stock has been taken up. It is now stated that the project will be pushed forward very rapidly.

Oil Burning Locomotives.—The management of the Southern Pacific Railroad has decided to extend the burning of liquid fuel upon its locomotives. The extension is to be upon the locomotives running south to New Orleans and north to Portland. The saving in operation will be considerable.

◆

It is expected that the Siderides case oil works will be reopened this month. Mantascheffs are now negotiating with the workmen with a view to the re-opening of their works.

In the latter part of February, the first cargo of oil, produced at the Vega refinery was shipped by the Credit Petrolifer at Constantza to France to the order of the Compagnie Industrielle des Petroles. The whole output of the Vega refinery will be marketed through the intermediary of the Credit Petrolifer.

Telegraphic Address:—"OLEINE."
Telephone Nos.:—249 & 254 LIVERPOOL.
1990 MANCHESTER.

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The Petroleum Review.

By PAUL DVORKOVITZ.

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Editorial Notes.

In the Throes of Agitation. Without exaggeration, it can now be said that a powerful wave of agitation for reform is sweeping over the country at the present time, and rousing the shareholders of the Baku Russian Petroleum Co. to action. The strong feeling against the present constitution of the board of directors is no longer confined to the shareholders in or near London, but to-day in every part of the land the cry is going up for a management for the company that will at least be honest and businesslike. During the present week, most representative meetings have been held of Lancashire shareholders in Liverpool and Manchester, and in their plain out-spoken way the much aggrieved people of that county, who have sunk about £400,000 in the company, have unanimously demanded that the present management shall "be no more." Thus far, Yorkshire shareholders have had no opportunity to unitedly join the agitation, but in a few days we believe they, too, will have decided to support the movement which has for its aim reform and dividends.

A Roumanian Surprise. Roumania has had not a few surprises in the striking of most prolific territory when least expected, and another instance of this is now furnished by a a well on the property of the Steaua Romana at Baicoi. Many wells have been drilled at Baicoi, but some have yielded no oil at all, while others have produced but very small quantities. An old hand well, which long ago made a fortune for its owner—Mr. Stefanescu—constituted the proof of the existence of a prolific oil stratum at Baicoi, but the slight results achieved by the borings sunk during the past few years have discouraged many of the operating firms. In spite of this non-success, however, some firms are still continuing drilling, confident of ultimately striking the desired stratum. The latest spouter, which is situated close to the old unsuccessful borings, is further proof of the existence of the oil. The yield of this well, which at times reached 150 tons daily, did not unfortunately last more than a few days, for a fire broke out which destroyed the derrick and appliances. As a result of the appearance of the spouter, a great advance has taken place in the value of land, and many deals have already taken place. The most recent surprise is certain to bring about a revival of boring operations in the district.

The Petroleum Fields of China. Considerable interest is now being centred in the petroleum fields of China, and the Governor of Shensi—in which province remarkably successful efforts have of late been made to produce oil in large quantities—has determined to direct greater attention to the commercial value of the deposits. He has already submitted a memorial reporting the work accomplished thus far, and the arrangements made for building a railroad to the most likely areas, as well as the erection of a refinery. He points out that with regard to the production, the oil is found to be of very high quality, while the various districts around Yench'ang abound in encouraging signs of the presence of oil. Machinery is shortly to be transported to the districts where operations upon a commercial scale are to be started, but great difficulties have to be overcome, for the work of transportation is the only impediment to rapid progress. With the construction of new roads, however, it is believed that this can be remedied, and a producing and refining industry successfully established.

Progress in the African Fields. South Africa, too, bids fair to command the early attention of the capitalist. We have lately heard much of the oil indications in South Africa, but it will come as a surprise to many to find that developments are being so energetically pushed forward with a view to establish a South African petroleum industry. In Inhambane all is excitement at the present time, and this new field, which lies some 200 miles north-east of Delagoa Bay, is now being exploited by no less than eight companies, who are drilling upon claims which cover an area of about 75 square miles. There can be no doubt as to the importance which this new field will play should it become commercially workable. South Africa is a fairly large consumer of oil, drawing its supplies from America, though of late the Sumatra product has been gaining ground, being landed at Lorenzo Marques and forwarded from that point to the interior districts of the Transvaal.

The Union Oil Co. of California. The name of the Union Oil Co. of California has been brought prominently before the readers of the REVIEW of late on account of the fact that the privilege of laying the proposed pipe line for oil across the Isthmus of Panama in order to facilitate the placing of Californian oil upon the European markets, and consequently more than ordinary interest will be centred in the report of its operations, which is given upon another page of this issue. The concern, it is worth recollecting, was formed about six years ago, since which time its growth has been steady and consistent, the net earnings rising from 4·2 per cent. in 1903 to 15·8 per cent. last year. But it is during the past twelve months that the greatest progress has been made. In drilling for oil in Santa Barbara county the company has met with great success, so much so that many producing wells have had to be shut down awaiting an available outlet for the production. Thus the one aim has been to find this necessary outlet. The refinery has been greatly extended in order to cope with considerably more crude production than formerly, and now, as we have already recorded, a fleet of steamships has been purchased on the Pacific side of the Continent, which will ply between San Francisco and the Isthmus of Panama, there discharging their products for transport *via* the pipe line to the Atlantic seaboard for European markets. The Union is certainly making a strong bid for European trade, and they are displaying exemplary energy in their efforts to secure it.

LATE NEWS FROM BORYSLAW.

The decline in the production at Boryslaw continues, whilst at the same time there is a continued increase at Tustanowice, where not a day passes but that a new well becomes productive, or an old one increases its output by being deepened. Special mention must be made of the completion of a well by the Urycz Co., of Tustanowice, which from a depth of between 830 and 840 metres, has yielded 70 to 90 tons per day; Messrs. Nahlik and Malezewski have obtained a yield of 50 to 60 tons from a well 970 metres deep. In spite of the favourable results at Tustanowice, the total output of Boryslaw and Tustanowice shews a decline. It is expected, however, that the further development of operations at Tustanowice, where 100 wells are now in course of drilling, will in a short time fully compensate the loss in production at Boryslaw.

Dr. Stefan Freund has commenced drilling a well at Niebylow, on the property acquired by him from the Niebylow Syndicate. The geological conditions there are said to resemble those at Boryslaw, and the results of these pioneer operations are looked forward to with much eagerness.

ANGLO-RUSSIAN PETROLEUM COMPANY.

A meeting of the Anglo-Russian Petroleum Company was held on Wednesday, at River Plate House, Mr. H. Allen presiding. The chairman expressed regret that their work had been largely in vain and their resources had been dwindling owing to the troubles in Russia. The survey work had been hindered by an unusual amount of fever in the district, the general disturbances, the tyrannical interference with the surveyors by ill-informed local officials, and the difficulty in settling the troublesome question of boundaries. With their present resources they could go on to the end of the year. The report was adopted. Mr. Ewes moved that the number of directors should be increased to five, and this was agreed to. Mr. Philip Poore, Sir Harold Pelly and Mr. Ed. Lovibond were then separately proposed as directors by Mr. Ewes, and in each case the chairman declared the proposition negatived by a show of hands. A poll was demanded, and was fixed to take place at the company's offices on April 3rd.

AMERICAN NOTES.

The Jennings Field.—The latest information from the Jennings field shews that the production for the month of February steadily increased, the daily figures being about 21,500 barrels, or 625,000 barrels for the month. Six wells are now self-flowing, 22 are on the pump, and four are being operated with air. The Heywood Oil Co. had a production during the month of 304,000 barrels.

Recognition of American Lubricating Oils.—The current issue of the *Oil Investors' Journal* states that the excellent qualities of American lubricating oils are now being recognised on every hand, finding increased favour abroad where they are entering into severe competition with the lubricating oils of other countries. The *Journal* then goes on to quote our recent leader upon the subject, and concludes by remarking that indications are favourable for a continued growth of the lubricating oil trade during the present year.

THE OPERATIONS OF THE BAKU REFINERIES.

STATISTICS FOR AUGUST AND SEPTEMBER, 1905 (in poods).

I.—Manufacture of Illuminating Oils.

Distillation.

	Submitted to Distillation.			Products Received.				
	Crude.	Other Products.	Total.	Kerosene.	Residuals.	Other Products.	Loss.	Fuel used.
August	26,389,186	277,709	26,666,895	4,083,716	20,403,734	1,423,476	755,969	942,774
September ..	804,981	—	804,011	137,894	485,251	17,153	163,713	191,950

Refining

	Submitted to Refining.			Refined Products Obtained.			Chemicals used.	
	Kerosene.	Other Distillates.	Total.	Kerosene.	Other Products.	Loss in Refining.	Acid.	Soda.
August	4,218,553	15,279	4,233,232	4,116,817	13,548	103,365	20,075	7,433
September ..	634,988	1,150	636,138	613,605	1,116	21,417	3,220	1,527

II.—Manufacture of Lubricating Oils.

Distillates Received.

	Machine Oil.	Spindle Oil.	Cylinder Oil.	Goudròn.	Solar Distillates.	Residuals.	Other Distillates.	Loss in Distilling.	Fuel used.
August	841,288	106,676	49,545	439,075	1,383,044	1,110,128	18,943	185,296	514,851
September ..	—	—	—	—	—	—	—	—	119,973

Refined Products Received.

	Spindle Oil.	Machine Oil.	Cylinder Oil.	Loss in Refining.	Chemicals used.	
					Acid.	Soda.
August	108,122	877,580	42,531	104,725	40,870	5,586
September	4,488	186,746	—	22,400	6,639	997

The output of benzine distillates in September amounted to 14,630 poods against 101,814 poods in August; that of refined benzine amounted to 10,070 poods in September against 42,277 poods in August.

There were no solar oils at all produced in September.

The Closing of the Batoum Case Oil Works.

(Continued from page 204.)

7. The tin making shed, 273 feet long and 15¼ feet high, walls of brick and beton, windows of cast-iron and wood, roof and rafters of iron, floor of wood. It contains 208 benches for the manufacture of oil tins. There is an arrangement of belts for the automatic delivery of the ready tins into the filling shed. Attached to the department are a soldering shed for soldering on the handles to the tins, 41½ feet long, 29 feet wide, and 14½ feet high; the walls are of brick and iron, window frames of cast-iron, roof of iron, rafters of wood, floor of concrete; also a soldering shed for tins, 119 feet long, 46⅔ feet wide, and 13 feet high; walls of beton and brick, windows and doors of cast-iron and wood, roof of iron, rafters of wood and floor of cement. This contains 28 soldering ovens.

8. Six storehouses for ready but empty tins and cases and sundry tools, 105, 112, 112, 112, 140 and 140 feet long, 28 feet wide each, and 11¼, 11⅓, 18, 15¼, 16¼, 16½ feet high; walls and roofs of corrugated iron, windows and doors of cast and wrought iron, paved floors.

9. Shed for repairing cases, 112 feet long, 28 feet wide, and 14¾ feet high; walls and roof of corrugated iron, windows and doors of cast and wrought iron, floor of cement.

10. Store for rags, used for wipeing the tins after they are filled, 35 feet long, 17½ feet wide, and 15½ feet high; walls and roof of corrugated iron, doors of iron, paved floor, no windows.

11. Tank for feeding the filling shed with oil, which flows by gravitation; of iron, with flat roof, stone foundation, and on eight stone pillars.

Nine lines of railway lead into the case factory, of an aggregate length of 9,835 feet, with 17 points, and inside the works between the buildings, there are three lines of an aggregate length of 2,203 feet, with three points. There is also a narrow gauge line, 5,110 feet long. All the above are inside the works enclosure.

On the eastern waterside plot, there are situated the stack of stock boards, partly open and partly roofed over. On this plot there are two lines of railway, which mount up in a spiral line into the second floor of the saw mills, where the waggonettes are loaded with boards by means of windlasses.

The company own two jetties on iron piles, and a special so-called coasting wharf. These wharves are provided with lines of railway for transporting cases in waggonettes drawn by horses. All these facilities enable them to quickly load cases into their own barges, and have them towed out by their own tugs, round the coasting and petroleum jetties into the petroleum harbour, the place of anchorage of the sea-going steamers. The firm has 27 iron barges and two tugs. For transhipment from the barges into the steamers there are two elevators, each of which delivers on board a steamer 10,000 cases per day.

Thus were the Bnito case oil works equipped in 1898, when the report of the Commission was written. Since then many improvements must have been carried out, and additions made to the plant. The above is, however, quite sufficient to give an idea of the magnitude of the works and the business done there.

The next place in the report of the Commission after Bnito is given to the works of Messrs. Mantascheff and Co. The Mantascheff case oil factory, which was started simultaneously with some others in 1886, at first occupied, compared to Bnito, and even other firms, a very modest place, but later with the development of the Mantascheff producing business at Baku, their Batoum establishment also began to develop.

Mr. Mantascheff, himself a man of great energy and business acumen, who stands now in the forefront of Baku petroleum producers, soon took steps to extend his business at Batoum. At first the case factory was enlarged and combined with the adjoining case oil works of Mutaffoff and Co., which were bought up and both made into one. This brought up the capacity of the works to 15,000 cases and 40,000 tins per day. By the further purchase and re-opening of the works which formerly belonged to Richner and Co., situated on the seashore side by side with the Bnito works, the output of the three combined factories went up to 20,000 cases and 50,000 tins per day, thus equalling, if not exceeding, the capacity of the Bnito works. It is unnecessary to give any detailed description of the Bnito works, which, except in a few details, would be merely a repetition, although they are admittedly the better equipped of the two. Apart from some minor improvements, the Bnito works has this advantage over the Mantascheff in possessing automatic transporters for empty and full cases and tins from one part of the works to the other. Another substantial difference is the mode of transporting of cases from the works to the wharf for loading; whilst the Bnito works used water transport for this purpose, at the Mantascheff works this was done by rail. Both methods have their advantages and disadvantages, of which we shall speak later.

The average daily output of the Bnito works was 20,000 cases, but there were times when it went up to 30,000 cases or more. The two firms together were thus capable of turning out daily an average of 40,000 cans, or a maximum of 50,000 cases and 100,000 tins, and are therefore in themselves capable of satisfying the needs in case oil of the Near and Far East to the extent of 11,000,000 to 12,000,000 cases, leaving out of account the other case manufacturing firms at Batoum.

The cases as made at Batoum are 52 centimetres long, 27 c.m. wide, and 36 c.m. high. For tins with high capsules, which are exclusively exported to Java, the cases are made 37 c.m. high. An accurate measurement of the boards which go to make a case are equal to 0·0125 cubic metres, including waste, so that a cubic metre of boards ought to yield 87 cases. In the making up of such case there were used 40 wire nails, 1¾ and

1½ inches long, and weighing about 3 ozs. The total weight of a complete empty case is 12 Russian lbs. or 10¾ English lbs.

The kerosene tin is made out of two sheets of tin plate, 18¾ inches by 14 inches, bent in half to make two sides, and making together the body of tin, and of one narrow sheet of tin 20 by 10, cut in half to form the top and bottom. A small quantity of tin is also used for the valve covering the opening through which the tin is filled. The tin thus put together is soldered on all sides to make a complete tight vessel with a wire handle soldered on to the top. The weight of an empty tin is 2 lbs. 84 zolosnites Russian, or 2 lbs. 9½ ozs. English, without the solder. The solder used for each tin is—tin, 0·6 oz.; lead, 0·9 oz.; acid, 0·3 oz.; and a very small quantity of copper. The handle of a tin takes up 0·52 oz. of 4 mm. wire. The weight of a complete empty tin is approximately 3 Russian lbs. or 2·7 English lbs. Each tin is capable of holding 36 Russian lbs. or 32·4 English lbs. of oil.

Thus a case of oil filled and ready for export weighs 2¼ poods, made up as follows:—

	Russian pounds.
Oil, net, in 2 tins	72
Wooden case	12
Two tins	6
	90 or 2¼ poods

On the basis of the weights ascertained as above, we can, by a little calculation, arrive at the quantities of materials, used by each firm, and all the firms together, and we shall see how the ozs. and lbs. of materials used for each case become transformed into tons and whole shiploads.

As a first instance we will take one day's output of the Mantascheff works, amounting to 20,000 cases and 40,000 tins. Apart from the oil, this output would necessitate the use of the following quantities of materials:—

	Poods.
Boards, 230 cubic metres	6,900
Tin plate	2,852
Tin	41½
Lead	62
Soldering acid	27
Wire	37
Nails	200
Copper	2
Total	10,122

The total annual output of the Bnito works of 4,000,000 cases necessitated the use of the following quantities of materials:—

	Poods.
Boards, 46,000 cubic metres	1,380,000
Tin plate	570,400
Tin	8,328
Lead	12,405
Soldering acid	5,400
Wire	7,400
Nails	40,000
Copper	400
Total	2,024,423

During the last five years the Batoum case factories have on the average produced about 12,000,000 cases and 24,000,000 tins per annum. The materials used up by the Batoum case factories per annum would work out, therefore, on the same basis as follows:—

	Poods.
Boards, 138,000 cubic metres	4,140,000
Tin plate	1,711,200
Tin	24,984
Lead	37,485
Soldering acid	16.200
Wire	22,200
Nails	120,009
Copper	1,200
Total	6,073,269

To complete his calculation, the author calculates the quantities of materials which must have been used up at Batoum to produce the 180,000,000 cases, which were exported from Batoum during the whole time of the existence of the case oil trade, *i.e.*, from 1886 to 1905 inclusive:—

	Poods.
Boards, 2,070,000 cubic metres	62,100,000
Tin plate	25,668,000
Tin	374,850
Lead	562,140
Soldering Acid	243,000
Wire	333,000
Nails	1,800,000
Copper	18,000
Total	91,098,990

or 1,469,338 tons. These figures, however, speak only for the quantities of materials used up at the works. The total quantities imported were much larger as there are large stocks of materials held by Bnito and Mantascheff, as evidenced by the huge stocks of timber at the wharves. There are also large stocks of tin plate and other materials, as the firms usually kept in hand a stock sufficient for a six months' output.

It is also interesting to note the sources from which all these quantities of materials come. The official report from which the author draws all his statistical data, mentions the following sources of supply of the various materials:—

1. Timber, pine and fir boards, come mainly to the extent of two-thirds of the total quantity from Austria (*via* Galatz or Reni), also from Kherson, on the Dniepe, and from Novorossisk (from the Volga basin). Beginning from last year the timber came also from the Kodor district of the Caucasus, while a small quantity was importsd from Kerasund, in Asia Minor.

2. White tin-plate is obtained from Swansea, England.

3. Wire mats from Russia, chiefly Riga.

4. Tin bars from England and France.

5. Lead from France.

6. Wire (for handles), from Riga, Russia.

7. Zinc, in sheets, for capsules, from Sosnowice, Russia.

8. Cork rings for the same capsules, from Odessa, Russia.

9. Copper for soldering irons, from England and France.

10. Soldering acid and zinc in bars for soldering, from Riga, Russia.

(To be continued.)

The Baku Russian Petroleum Company, Limited.

Successful Meetings for Reform held in Manchester and Liverpool.

The agitation for reform in the conduct of the affairs of the Baku Russian Petroleum Co., Ltd., has been taken up in a most enthusiastic manner in the provinces, and during the present week two very successful meetings of shareholders in the Liverpool and Manchester districts have been held in the respective cities. The meetings were called at the instance of Sir A. C. De Renzy, Dr. Whitty, and Dr. P. Dvorkovitz, and were arranged in order that the Lancashire shareholders, who for the most part never attend the general meetings in London, might be made acquainted with the facts which have led up to the present agitation for a "clean sweep" in the management.

The first meeting took place at the London and North-western Hotel, Liverpool, a very large number of shareholders assembling in the Banquetting Hall.

It was proposed that Alderman Snape should take the chair, but that gentleman declining, Dr. Dvorkovitz presided.

In opening the meeting, Dr. Dvorkovitz detailed the reasons which had brought them together that day, and explained the action which had been taken in London against the present board, mentioning that the desire of the conveners of the meeting was that, if possible, a local committee should be formed in order to select a representative to serve upon the directorate should the present agitation be successful. Their company consisted of about 3,600 shareholders, of whom 300 resided in foreign countries, while out of the remainder 1,700 resided either in Lancashire or Yorkshire, and that number held approximately 800,000 shares. Those shareholders were not represented on the board of management at all since the retirement of Sir James Kitson, which was some years ago. Their Baku Russian Co. had been and was very badly mismanaged, and it was owing to that mismanagement that year after year it had gone from bad to worse, until now the position was such that if the shareholders did not take action, they would have practically no assets left at all.

Some eight months ago he put himself into communication with some of the directors of the company, and pointed out the gross mismanagement which had brought about such disastrous results, and he indicated that as that was so, the directors should be removed immediately. The board took no notice of this appeal, and therefore he felt that in the interests of the petroleum industry which he represented, he should make known his case to the shareholders. Consequently, he legalised his position by purchasing shares in the company. He then called an extraordinary meeting of shareholders, and he pointed out to them that they had been robbed by the promoters and directors of their assets. The promoters—Sir James Kitson, Mr. Gladstone, Mr. Hubbard, and Mr. Moore—had bought the property for £850,000, and they sold it to the company for £1,200,000, thus making a profit of £400,000. (Cries of "Shame.")

They all knew that promoters of public companies were bound to make some profit, but he thought everyone would admit that to make such a profit was beyond all reason. The promoters also knew when they floated the company, that the provision of £50,000 for working capital was absolutely inadequate to conduct the business of a company such as theirs, which was certainly of an intricate nature. When the prospectus of their company came before the public, they were in possession of three refineries, they had a fleet of steamers, and storage accommodation all over Russia. Their board knew quite well after their experience with the Russian Petroleum and Liquid Fuel Co. that such an amount of working capital was not reasonable, and so the result was that within three months of the formation of their company, the directors began to sell the refineries one after another, as well as the storage accommodation and the fleet of steamers. But after having got rid of such valuable assets as he had enumerated, their company might have been able to pay dividends had the oil which their properties produced been sold in a free market. But what did their directors do? They compelled their company to sell its oil to the Russian Petroleum and Liquid Fuel Co., and thus the shareholders were robbed of very large profits. But in selling to a rich company like the Russian Petroleum and Liquid Fuel Co. they sold practically to themselves. They never got paid in cash, but they received bills for the sales, and those bills went to either one or other of the directors who discounted them at a great profit to himself. (More cries of "Shame.")

The speaker then dealt at length with the various acts committed by Mr. Gladstone, which had acted in a very detrimental way to the shareholders, and paid special attention to the charges for the chartering of steamers and the selling of the oil.

Proceeding to speak as to the necessity for reform, and the company having its own independent manager at Baku, the speaker said that the Investigation Committee had seen the necessity for this, for they had stated in their report that the management was neither economical nor independent. The shareholders at the meetings had always advocated an independent manager, for the reason that, if they had one who was not independent, he was unable to sell their oil at the best price.

That was the general feeling when Mr. Tweedy, who was managing two companies, was their manager. But when he resigned, the board appointed Mr. Urquhart, who was already manager of the Schibaieff Petroleum Co., the Russian Petroleum Co., and the Bebe-Aibat Petroleum Co., four of the leading English companies. From the point of view of production, the importance of those four companies would be seen from the fact that their united production of crude oil was equal to that of two such firms as Nobel and Mantascheff.

But the interests of those various English companies which were being run by one management clashed, for whereas their own company, having no refineries, had to sell their crude oil in the open market in order to realise the best possible price, the Russian Petroleum and Liquid Fuel Co. and the Schibaieff Co. each had their own refineries, and naturally were desirous of buying their oil at the cheapest price. Thus it would be seen that, to achieve the best possible results, it was necessary that their company should have an independent manager, but to this the directors had always turned a deaf ear.

If only the concern were properly managed, they would be able to return good dividends, and not have their shares standing at 3s. each, as was at present the case. The value of the production of their company was something like £6,500 per week. That was what their production of crude oil ought to be realising in the open market at prevailing prices, but whether they were getting that he could not say. But their manager might have concluded some forward contract for the sale of the oil to one of the other companies he was managing, and thus their company would not reap the benefit they ought to from having one of the most valuable properties in Baku. Their production was about 4,200 tons per week, and on the open market that was worth about 30s. per ton. The cost of production ought not to exceed 12s. per ton, and therefore a profit remained upon every ton of oil they produced of about 18s., so they could almost reckon upon a profit of nearly £4,000 per week, which would be ample enough to pay an excellent dividend, yet in the face of the prevailing high prices, they had the directors' warning that they did not know whether they would be able to pay any dividend. He really thought the time had come when the shareholders should take the matter seriously to heart and look after their own interests, and see that the business of their company was conducted in a proper business fashion. It was essential that the shareholders from Lancashire and Yorkshire should have their own representative on the board.

Dealing with the gentlemen who composed the directorate of the company, the speaker asked how Col. Philipps came to be appointed on the board. Did he hold any shares in the company previous to his appointment? No, his brother and himself bought the shares simply to obtain the necessary qualification. Mr. Leslie was also appointed to a seat on the board, although both gentlemen publicly admitted that they knew nothing of the business. Still, each of these gentlemen received their remuneration; and, in addition, the firm of Messrs. France, Fenwick and Co. were appointed to act for the company, and they received £1,500 per annum—more money that was paid away uselessly. Could any business in the world pay when it was conducted upon such principles? (Cries of No, No.)

In conclusion, the speaker appealed to those present to give their support to the agitation, and by appointing a small Committee to act jointly with one from Manchester to do all they could to save their investment by getting a strong Lancashire business man upon the board. Quite recently when he was in Russia, he was asked by the Minister of Finance how it was that the British investor did not come forward and take a greater interest in the industries of Russia, and his reply was that the confidence of the English investor had for the time being been ruined on account of the working of a certain company promoting group in London, and therefore the whole industry had to suffer on account of these few people who had done their best to ruin Russian enterprise. He was sure if the shareholders of their company would only rouse themselves and demand to have their business run upon strict business-like and straightforward lines, then the petroleum industry in Russia would prosper, and they would all secure substantial returns for their capital.

The meeting was next addressed by Dr. Whitty, who at the outset while reminding the shareholders that their meeting together was of great importance, it was no use crying over spilt milk. They could not get back the money which had been already lost, but what they could do was to secure for themselves a good return for the future. There was no doubt that the properties were exceedingly valuable, and given efficient management they could almost immediately be earning good dividends. Prices for crude oil were now phenomenally high, and so profits should be correspondingly great, but in their case under the present management, owing to the various commissions that had to be paid, there were no profits left for the shareholders. They all knew that anybody who agitated for reform was always subject to unfriendly motives being attributed to them, and it had been said that in pressing forward the present agitation for reform, they had some deep design in hand. He wanted to assure those present, however, that the only desire they had was to see the business prosper, and earn dividends as it ought to do for the shareholders. It had been said that they wanted to get the properties in the hands of foreigners, and in reply to that insinuation, he could only say that they had not the slightest intention of so doing; in fact, the present steps they were taking would effectively guard against that. They wanted the shareholders to appoint a new board of management which would be composed of *bona-fide* shareholders, and not men who were connected with financial groups, and have upon that board a representative from Lancashire and Yorkshire. If they could manage to get a new board appointed upon these lines, then there was no doubt that they could easily put the company upon a paying basis almost immediately. They might recollect that some weeks ago he put before a meeting of shareholders in London a proposal to lease the properties to a syndicate, but that proposal had been definitely withdrawn, and the syndicate had informed him that they would not renew their offer. That proposal to lease the properties had many advantages no doubt, but it also had disadvantages, and knowing now the value of the property, he did not think he would vote for the proposal if it were again put forward. But when he placed the matter before the shareholders in London, he thought half a loaf was better than no bread at all, and he thought that inasmuch as it seemed impossible to get the present directors removed, they should agree to take the half loaf. With the continuation in office of the present board, there was not the slightest likelihood of their ever getting dividends, and therefore had the leasing scheme been accepted it guaranteed a return, though perhaps small.

As for the present board, it was clear that they had not acted in the interests of the shareholders. There were many instances he could mention if only time allowed, but he would take that of the debenture issue for £125,000. There they had a sum of money which was loaned upon the security of a property which it was admitted was worth over a million sterling. But the shareholders never had a chance of taking them up; they were issued to Mr. Gladstone and his friends and to Mr. Philipps and his friends. Mr. Gladstone and his friends took up £75,000 at a discount of ten per cent. plus a commission, and the remainder were taken up by the Philipps group at 91½. With regard to the cnntracts entered into by the directors, they were warned in the strongest possible terms as to what the results of those contracts would be, and yet in spite of that warning they persisted in carrying through the arrangements, with the results which were foretold. After dwelling upon the lack of efficient management at the properties of the company, the speaker emphasised the fact that unless the shareholders could manage to get the present board entirely removed, and have no more of the old group, but substitute them by *bona-fide* shareholders, then there would be no possible hope for the company. Whatever reform would bring them, they could not in any case be worse off than they were now. (Laughter). Now they were getting nothing, and under the present management they never would do. With an energetic and competent management over the concern, they could in time wipe off the arrears and everybody would get their money in full, while their future success would be assured, and that without there being any necessity at all for an assessment to be levied. All that was required was for the provincial shareholders to join in the agitation for reform, and by seeing that the present directors received no more proxies from them, but that they were given in favour of the removal of the present board, and given that, then their investment would in the long run turn out very satisfactory. (Hear, hear.)

Alderman Snape said he was one of the unfortunate original shareholders of both the Baku Russian Petroleum Co. and the Russian Petroleum and Liquid Fuel Co., and therefore he could not be said to have come through his experience with very large profits. He certainly was in sympathy with anything which could be put forward to help them to put the business of the Baku Co. upon a better footing than it had been. It was very well to say that it was no use crying over spilt milk, yet one could not forget that had that company not been promoted under the names of certain gentlemen, it would never have been taken up by the public. Then, again, had the company been promoted under the present company law, the public would not have touched it, for the present law required that every director should state in the prospectus what his interest in the company was to be. Had they known that the property which was being sold to their company for £1,200,000 only cost £850,000, he felt sure they would never have applied for a single share. But fortunately the Company Act had stopped all that sort of thing which was possible when their company was formed, but that did not make it any better for them as shareholders. Still, under the circumstances there was no reason why after having taken such a great deal of money, they should not return part of it to the company. (Hear, hear.) Personally he was induced to take shares in both companies because of the high character of the gentlemen whose names were on the prospectus—the chairman of the London and North Western Railway, Sir James Kitson, Mr. Gladstone and others.

Coming to the crucial point, he said that he did not think that such men as stockbrokers, who bought large blocks of shares, cared very much for the interests of the general body of shareholders, although he did not agree that directors like Mr. Gladstone should be removed. He agreed with the proposal that Lancashire and Yorkshire should have one director upon the board. With oil running at its present price there was no doubt that under proper management the returns from their company's operations would be enormous. He was not going to argue that the present board should be turned out, but, of course, it was a matter of opinion, but he thought they from Lancashire and Yorkshire should be represented on the directorate by a gentleman who should endeavour to get the business upon a paying basis.

A Preference Shareholder, in the course of a lengthy speech, said he thought the attitude of those who were leading the agitation was right in desiring to make a clean sweep of the present board. It might be that if the sweep was not a clean one, it would be a case of a little leaven leavening the whole, and after their past experience they did not want that. He, therefore, did not think they could hope for any material change in policy unless they went for a clean sweep. He then moved a resolution as follows:—

> "We, the Lancashire shareholders of the Baku Russian Petroleum Co., in the meeting assembled in Liverpool, this 20th day of March, 1906, having heard a full explanation of the objects of the present agitation, do hereby fully approve of the same."

The resolution was seconded, and supported, and carried unanimously, being signed by the members present.

It was then suggested that a local Committee should be formed, and names were put forward to serve upon this. The name of Alderman Snape was mentioned, but in view of his attitude, as suggested in his speech, of strengthening the board by including new blood rather than removing the present directors, great opposition was put forward, and upon a shew of hands, the name was unanimously deleted from the Committee, which, consisting of six members, was elected.

Hearty votes of thanks to Drs. Dvorkovitz and Whitty for their efforts to secure reform having been passed, the meeting closed.

THE MANCHESTER MEETING.

Two hours later, a meeting of shareholders in the same company was held at the Exchange Hotel, Manchester, this being also largely attended, a number of influential shareholders from the near lying districts in Yorkshire being present.

Dr. Dvorkovitz apologised for the absence of Sir A. De Renzy from the meeting owing to illness, and then called upon Dr. Whitty, who, he added, had with his family a holding of £5,000 shares in the company, to address the meeting.

Dr. Whitty said their chief object in calling the Lancashire shareholders together that day was to enable them to have a discussion among themselves, and put any questions to those who were conducting the agitation that they might desire to be answered. Dr. Dvorkovitz and himself had just come from Liverpool, at which city they had had a most rousing meeting, and a number of the shareholders there had formed themselves into a committee, in order that they might meet a similar committee which the speaker trusted would be formed at Manchester, and choose a gentleman from among their number who would be willing to serve upon the new directorate should one be appointed. He did not wish that afternoon to go into the full details of the past affairs of the company, for they had been fully ventilated in the reports which had been issued to the shareholders, and in the discussions which had taken place at the meetings. There was no question at all that there had been gross mismanagement somewhere. The company's property was a rich one, and in the hands of good management huge profits could be made. The fact that for several years no dividends had been paid, but on the contrary huge debit balances had been piled up, was sufficient condemnation of the present management. Certain members of the present board had publicly announced that they did not know anything about the oil business, and that fact was doubtless one of the reasons why their company had not been successfully run.

Unfortunately it was their belief that the directors and promoters had, from the commencement, run the company in their own interests rather than in the interests of the shareholders. Apart from the quite inadequate capital for the working of such a company, the want of proper knowledge of the oil industry on the part of the directors had been the prime cause of the disasters, for an extraordinary series of contracts had been entered into for the disposal of the produce. The oil had been sold at prices which were entirely unremunerative, contracts were taken up for millions of poods ahead, and at the present time he understood that their oil was being sold at a price which was about 12s. below the average market price.

When agitation for reform was started, those who conducted it were always liable to have ulterior motives imputed to them, and in the present instance he had seen suggestions in the papers that they were trying to get the property handed over to the hands of foreigners. To that he wished to give an emphatic denial, for such an object was farthest from their minds, and to prove that that was so that meeting that afternoon was evidence. What they did want to do was to get the management out of the hands of the present board of directors who had lost the confidence of the shareholders, and place it in the hands of *bona-fide* shareholders whose interests would be those of the general body, and who would have no opposing interests to serve. With himself, he had no desire to occupy a seat on that board, and he was authorised by Dr. Dvorkovitz to make the same disclaimer as regarded his intentions. Their properties were so valuable that if they could only get anything like efficient management, and the company run on ordinary business lines, they could almost immediately obtain profits subject to there being no hampering restrictions. He could assure them that if they could only get a new board into power, their properties would be turned into very good paying properties, and without the shareholders having to put their hands into their pockets.

He, therefore, asked the ladies and gentlemen present to support the agitation to their utmost and work, as he was working, in order to get some return for his locked-up capital in the concern.

Dr. Dvorkovitz, in addressing a few words to the meeting, said that the bulk of the capital in the Baku Co. had come from the pockets of Lancashire and Yorkshire shareholders, many of whom were poor people who could ill afford to lose their savings. Dr. Whitty and Sir A. De Renzy had taken personal interest in the agitation for reform, because they had large holdings at stake, but personally he had only acquired a few shares to justify his taking action as a shareholder. He had felt that if that company and other companies continued to be mis-managed, then the sympathy of the British investors in the Russian petroleum industry would go for ever. They had hoped that when British capital entered the Russian petroleum industry, it would bring with it British brains, but that had not been so. The iron industry in Russia was established by British capital and brains, as also was the cotton industry in St. Petersburg, but unfortunately for the investments in Russian petroleum enterprise, the concerns had fallen into the hands of company promoters of the worst type in the City of London, and the result was that a series of disasters had followed. They had a very valuable property, but the management they had got was as bad as it possibly could be, yet there was still time to save the asset of the company, and put the concern upon a profit-paying basis, if only the shareholders of Lancashire and Yorkshire would infuse into the company their brains. They did not want the professional company promoters to manage their business; all they wanted were common-sense men of the straightforward type, and when they got that, then prosperity would be theirs. Their wells were to-day producing about 4,000 tons of crude oil per week, which at the present market price of 30s. per ton meant that their weekly income was about £6,000, and if they placed the cost of production at £2,000, including management expenses, they would see that the remaining profit was about £4,000 weekly, but he was afraid that with the present management that was totally lost.

In conclusion, the speaker impressed upon the shareholders the necessity of paying great attention to the conduct of the company in which their money was invested, and assured them that if only it were put upon a proper business basis, and the present directorate removed, they would have no reason but to feel thankful that they had invested in a Russian petroleum enterprise.

Discussion was then invited, and a number of questions answered.

One Shareholder, while expressing the thanks of the meeting to the gentlemen who had addressed them, remarked that it was a very difficult thing to get shareholders in a losing company to come forward and take an interest in its management. They did not like it to be known that they had invested in a concern, the shares of which were of such little value at the present time, and which company was going from bad to worse. He appreciated the good which a Committee of the shareholders present could do in selecting a gentleman, together with the Liverpool Committee, who would be willing to act upon the Board, but the disadvantage was that the shareholders did not know each other. His faith in the Baku Co. had always been owing to the fact that if there was oil below ground, and if that could be brought above ground, then they would get profits, but time after time their directors had come forward with first one excuse and then another, and it had been that which had deluded many shareholders. But now it was easy to see that there had been gross mis-management all round, and he trusted that the shareholders would strike for reform which would certainly tend to better their position.

Other Shareholders present made a few remarks, after which a Committee of six gentlemen were unanimously selected to confer with the Liverpool Committee later in the week.

Votes of thanks to both Dr. Whitty and Dr. Dvorkovitz concluded a meeting, which throughout shewed unmistakable signs of enthusiasm in the cause for which it had been called.

PRODUCTION OF CRUDE OIL IN ROUMANIA IN JANUARY.

The output of crude oil at the Roumanian oil fields in January, 1906, compared to December, 1905, was as under:—

	January, 1906. Tons.	December, 1905. Tons.
Prahova District—		
Bustenari	37,271	39,795
Campina-Poiana	6,906	7,646
Moreni	5,061	8,667
Baicoi-Tintea	925	929
Other Fields	818	498
Total in Prahova	50,981	57,535
Dambovitza District	1,441	1,770
Buzau	1,000	1,046
Bacau	789	779
Total	54,211	61,130

The complete figures for December given above are 4,293 tons above the provisional figure of 56,837 tons taken into consideration in making up the statistics for the year. The actual total output of crude oil in Roumania has therefore amounted to 619,163 tons.

To the above provisional figure of the output in January of 54,211 tons has to be added about 3,000 tons representing the output of firms who had not yet made their returns. The total output in January is therefore about 58,000 tons or about 3,000 tons less than in December.

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{11}{16}$-$\frac{13}{16}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	3/3-3/9
,, ,, ..	£650,000 5½% Pref.	£1	6/9-7/3
Bibi-Eybat Petroleum Co. ..			10/0-11/0
Californian Oilfields	£250,000 Ord.	£1	6⅜-6⅝
European Petroleum.. ..	£550,000 Pref.	£1	3/0-4/0
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	81-84
Russian Pet. & Liquid Fuel ..	£500,000 6½% Pref.	£1	12/0-13/0
,, ,, ...	£600,000 Ord.	£1	10/6 11/6
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	3½-3¾
,, ,, ...	£575,000 Ord.	£1	9/0-10/0
Shell Transport & Trading ..	£2,000,000	£1	23/6-24/6
,, ,, ,, ..	£1,000,000 Pref.	£10	9⅜-9⅝ C.D.
Spies Petroleum Company ..	£312,500	10s.	7/3-7/9

SCOTCH COMPANIES.

Supplied by Messrs. MACLEAN AND HENDERSON, STIRLING.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. 8½ pd	£199,750	£10	17¾
Do. 6% Cum. Pref. ..	£100,000	£10	12½
Burmah Oil, Ord.	£1,100,000	£1	55s. 9d.
Do. Pref.	£250 000	£1	26s. 0d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	$8\frac{7}{16}$
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	18
Do. New (£8 10s. pd.)	£131,750	£10	16¼
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	82s. 6d.
Do. 6% Cum. Pref.	£100,000	£10	12⅞
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	30s. 0d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	66s. 3d.
Do. "B" Deb...	£150,000	£100	150

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on March 18th.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	555	560
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	4,000	4,050
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	171	173
Neft Co.	250	—	—
Nobel Bros.	5,000	9,000	9,100
,, ,, ...	250	—	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

DUTCH COMPANIES.

Company.	Quotations March 14th.	Quotations March 21st.	Florins.
Arnhemsche Petroleum Mij. ..	80	80	1,000
Dordtsche Petroleum Mij. (Pref.) ..	125¾	124	500
,, ,, ,, (Deb. 4½%)	102¾	102¾	1,000
Elzasser Petroleum Mij.	2¼	2⅛	1,000
Gaboes ,, ,, ...	19¾	19¾	—
Holl. Rumeensche Petroleum Mij...	27	26-27	1,000
Int. Rum. Pet. Mij.	89	89	500
Java Petroleum Mij...	30	30	1,000
Koninklyke Nederl. Pet. Mij. Shares	485-488	484½	250-1,000
,, ,, Share certificates	488½-489½	486	1,000
Mœara Enim Petroleum Mij. ..	115	114½	100
,, ,, 1-1,000 Oblig. 5	102	102	250-1,000
"Moesi Ilir" Petroleum Mij. ..	35½	34⅞	—
Nederl.-Rumeensche Petroleum Mij.	16	12½	
Nieuwe Ned. Petroleum Mij. And...	55¼	55¼	1,000
Oliebronnen in Hannover Mij. ..	175	172	—
Panolan Maatschappij Cert. ..	340	340	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	141	141	1,000
,, ,, (Common) ..	95	94	—
Sumatra-Palembang Petroleum Mij	61½-61¾	60	500

LONDON OIL SHARE MARKET.

FRIDAY, MARCH 23RD.

There is little to report in connection with the Oil Share Group on the London Stock Exchange, and, unfortunately, where changes occur they are of a downward character. The present account being of 19 days duration, which generally tends to drooping prices and restricted business, is drawing to a close, and it is hoped that with the advent of the Mid-April account (which commences on Monday) the prospect will improve.

For reference we quote last Saturday's prices, when Anglo-Russians were $\frac{1}{16}$-⅛, Assam Oil ⅝-⅞, Baku Ordinary 2s. 9d. to 3s. 3d., Preference 6s. 9d. to 7s. 3d , Bibi-Eybats ½-⅝, Debentures 88-93, Californian Oilfields, 6½-6¾, Refineries ⅜-½, European Preference ⅛-¼, Debentures 81-86, Russian Ordinary 11s. 6d. to 12s. 6d., Preference 12s. to 13s., Debentures 87-90. Schibaieff Ordinary 9s. to 10s., Preference 3⅜-3⅝, Shell Transport Ordinary 24s. 6d. to 25s., Preference 9¼-9¾, and Spies $\frac{11}{32}$-$\frac{13}{32}$.

From these figures the only alterations have been a fall of $\frac{1}{32}$ at $\frac{1}{32}$-$\frac{3}{32}$ in Anglo-Russians, and a rise of $\frac{1}{32}$ in Spies on Monday, and a fall of 1s. in Russian Preference on Tuesday, at 11s. to 12s.

To-day's prices are given in full on page 228.

◆

BAKU PRODUCTION IN FEBRUARY.

The modest figure of the output of crude oil at the Baku oil fields in February of 30·7 million poods, which is just published, has served to further strengthen the tone of the market at Baku. The restricted output and absence of spouters create conditions favouring further advances in prices. Sellers now quote crude oil spot 27½ copecs per pood, residuals 31 copecs, kerosene in waggons 30½ copecs, and kerosene in ships 29½ copecs. In view of the exceedingly small stocks available and the opening of the navigation, buyers have no option but to pay the prices demanded. The greatest interest is evinced by buyers in residuals, large quantities having been sold at high prices at Baku and Astrakhan.

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The Petroleum Industrial & Technical Review, Ltd.

Saturday, March 24th, 1906.

THE EFFECT OF THE RUSSIAN DISTURBANCES UPON ENGLISH TRADE.

FEW there are among the members of the petroleum industry who possess anything like an adequate idea of the widespread losses which have occurred in many branches of trade consequent upon the serious disturbances in the Russian oil fields, and there are still fewer who have formed an opinion in accordance with the actual facts as to the great damage which has been done to English trade in general as to the direct outcome of the abnormal period through which the Russian petroleum industry has passed, and from which it is now fortunately emerging.

Nevertheless, it remains that a serious blow has descended upon many branches of England's trade and commerce, from which speedy recovery is out of the question.

Our readers, we trust, will have made themselves familiar with the significant facts plainly brought out in the articles which have been running in the Review for several weeks upon the export trade of Batoum, shewing the effect which the closing of the case oil work has had upon the port as an industrial centre. Mainly owing to the continual strikes and consequent disorganised trade in case oil, the works, which employed over 10,000 men, have permanently closed, and although the crisis must naturally be more acute than any effects we can feel in this country, the loss of trade to England alone is bound to be enormous.

The members of the Scotch mineral oil industry have not been backward in declaring that owing to forward contracts, they were not able to take advantage of the favourable opportunity which presented itself to them when the unparalleled crisis of last year occurred in the Russian petroleum trade, but what was an opportunity to one trade to secure additional profits, was, unfortunately, a stunning blow to many others in this country.

Let us first take the shipping industry—a branch of our commerce which keenly feels the effect of the vanishing of Batoum's export trade in case oil. During a year of normal trading conditions, case oil was shipped from Batoum to the extent of about 350,000 tons, this being carried, it should be borne in mind, by British ships for the most part. Last year, however, the export of case oil dropped to about one-quarter the usual quantity, the exports only being 90,000 tons, while now that the case oil works of Batoum have closed, the blow to the English shipowners will be still greater. In round figures we may take it that the transport of the case oil by sea works out at approximately 25s. per ton, though of course the freight rates vary considerably with the distance covered. The loss to English shipowners, therefore, owing to the decreased case oil transport last year from Batoum was considerably over £300,000, but, now that the greater part of the case oil industry has departed from Batoum, a safe and very reasonable estimate is that the loss in freights to our ships this year will be no less than £400,000. This amount could be greatly increased if we were to add the insurance changes which now have ceased, while if we take into consideration the reduced shipments of bulk oil, the figures would be swelled by several thousands of pounds. To the shipping industry alone, we thus see that the effect of the closing of Batoum's case oil works and the reduced export of bulk oil has been most serious.

But the greatest disaster which the closing of the Batoum works brought in its train has been to the Welsh tin plate trade. From the instalment of the article which appears in this week's Review it can be easily seen that every day the Mantascheff works were open, no less than 46 tons of tin plate, all brought from Swansea, were utilised in the production of the cases, while on the average the yearly amount of tin plates used was no less than 27,000 tons. Without going carefully into prices, we can presume with some degree of safety that the tin plates cost £400,000, or of a value to easily afford employment in South Wales for some thousands of miners and tin plate workers. To-day, however, this trade with Batoum has been reduced to the very lowest proportions without disappearing altogether, and if the present shipments of tin plates are kept up during the year, the total for the twelve months will only be a little over 1,000 tons, or about four per cent. of what the shipments were formerly.

We will now look at this loss to the Welsh tin plate trade from a financial point of view. During the first two months of last year, though the Russian petroleum trade was somewhat in a disturbed state, the shipments of tin plates from England to Batoum amounted to considerably over £60,000 in value, but for the corresponding period of this year, the value of the tin plates exported to Batoum was only £2,000, the exports for February alone being £1,500 in value, as compared with those for February, 1905, of £35,700.

But these significant figures do not by any means exhaust the list of losses which have been occasioned as a result of the Caucasian disturbances apart from the closing of the Batoum case oil works. The Russian lubricating oil trade may be said to be non-existent at the present time, for though this country takes from Russia in normal periods about 12,000,000 gallons or 50,000 tons, its supplies are now being drawn from other sources. The Russian lubricant has practically passed from the market, and so for what one used to pay about £8 per ton, to-day commands almost double that price, while even the American product offers no substitute at the former price of the Russian lubricant. In this respect, the consumers for lubricating oil in this country are the chief sufferers, for they have to pay an enhanced price for their lubricating oil, which in the course of twelve months will mean a loss to them of at least £150,000.

If space permitted, we could go into other details which would likewise tend to shew what an important bearing the disasters at Baku and Batoum have had upon English trade and commerce, but we have already said sufficient to prove the all-round serious nature of the Russian disorders when viewed from the standpoint of English trade.

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 22nd March, 1906, as follows:—

There is no improvement in the position, the market continuing very depressed, and further notices to terminate contracts have been delivered to workmen at several works. Prices are nominally the same as last week, say:—

IC	18¾×14	124 sheets	110 lbs.	12/6 per box.
IC	19¼×14	120 ,,	110 ,,	12/6 ,,
IC	20 ×10	225 ,,	156 ,,	17/9 ,,

F.o.b. Wales. Tin lining and iron hooping extra.

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Imports n o *Sweden*.—The imports of petroleum products into Sweden in 905 have amounted to 104,378.

THE AUSTRO-HUNGARIAN PETROLEUM REFINING INDUSTRY IN 1905.

By a series of calculations our contemporary *Naphta* in its latest issue, arrives at the following figures of the operation of the Austro-Hungarian refineries in 1905. By taking into account the production of crude oil in 1905, as well as the stock at the beginning and end of the year, it concludes that the quantity of crude oil delivered to the refineries was 702,625 tons. The official monthly statistics of railway deliveries from the wells shew only 622,127 tons for the year, but the difference of about 80,000 tons is accounted for by the fact that considerable quantities of crude oil are delivered to the refineries direct by pipe line or road.

The loss and quantity used as fuel at the wells, according to the statistics of the Petrolea Co. in 1905, amounted to 23,134 tons. The quantity used as fuel by industrial establishments outside the wells was 16,700 tons, making altogether 39,894 tons. By deducting the latter figure from 702,626, we get 662,732 tons as the quantity of crude oil actually treated at the Austro-Hungarian refineries in 1905. This figure is more correct than the one shewn by the railway statistics, of which it exceeds by 40,605 tons, which is approximately the quantity actually delivered to the refiners by pipe line and road.

It is interesting to ascertain in what proportion Galician crude oil is treated in Galician, Bukowinian, and other parts of Austria-Hungarian refineries. Again reverting to the railway statistics, we find that the refineries situated in Galicia and Bukowina have in 1905 treated 223,280 tons; other Austrian refineries, 281,776 tons; and Hungarian refineries, 157,675 tons. Translated into per cent.:—Galician and Bukowinian, 33·5 per cent.; other parts of Austria, 42·5 per cent.; and Hungary, 23·8 per cent. In 1904, the relative proportion of the refining of Galician crude oil was:—Galicia and Bukowina, 34·5 per cent.; rest of Austria, 39·4 per cent.; Hungary, 26·1 per cent. Altogether the Austria-Hungarian refineries have treated 73,743 tons of crude oil more than last year, solely in view of the increased exports.

The Austrian and Hungarian refineries in 1905 paid duty for home consumption on 236,953 tons of refined oil, or less than 3,065 tons in 1904, which points to a decline in home consumption. This is certainly an abnormal state of affairs in view of the constantly growing consumption of petroleum in all other countries, in spite of the development of gas and electric lighting. The refiners' cartel are urged to make every effort to extend the use of petroleum in the country both for illuminating and other purposes. Although there are no statistics to shew the proportion of petroleum used for illuminating and other purposes, it is a known fact that the rise of petroleum for illuminating purposes is stagnant also in other countries, and the increase in the total consumption recorded falls entirely on its growing use for cooking and heating purposes, and it is in that direction that the Austrian refineries should concentrate their efforts to raise the home consumption of petroleum.

The 11 large and 50 small refineries in Galicia and Bukowina have out of 236,953 tons of the consumption supplied 80,225 tons, or 33·85 per cent.; other Austrian refineries, 12 in number:—78,311 tons, or 33·05 per cent., the Hungarian refineries, 19 in number:—78,416 tons or 33·1 per cent. The refineries of the three groups have thus shared the home market equally between them. The quantity of crude oil treated by each of these groups of refineries, however, varies greatly. The largest quantity of crude oil is treated at the refineries in Austria, outside Galicia, which refineries work mostly for the export trade.

IN THE TEXAS FIELDS.

A SUMMARY OF OPERATIONS.

The latest details from the Texas producing territories shew decided activity in all the fields, but in many cases this has been attended with results not at all gratifying. Throughout February the Humble field continued to decline, and now its production is even less than that of Batson, for the output is scarcely 8,000 barrels daily, as compared with a production of over 100,000 barrels daily not many months ago. The general impression is that this decline will continue until the field takes a very back place as a producing district.

At Sour Lake the activity in drilling has been stayed by a serious fire which swept the Shoestring Tract at the beginning of the month. The fire assumed great proportions, and before it was extinguished it destroyed 22 standard rigs and equipment, in addition to 12 tanks and a quantity of oil.

At Spindle Top, the development operations are extending, and the total daily output of the famous field may now be taken at 3,000 barrels daily. At the end of February, nine wells were being drilled.

Saratoga has caused much interest during the past few weeks owing to two completions which are far above average proportions. One is the well-known as the Guffey Co., No. 4, and the other is the Britton Oil Co.'s well, on Hooks Farm. The former was brought in a gusher, while the latter is a very good pumper. It is reported that the capacity of the first mentioned well is about 12,000 barrels daily, but another report which reaches us states that the well has stopped flowing, and little hope is entertained for its recovery.

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The Campina-Moreni Co.—The production of the Campina-Moreni Co. at Moreni in January amounted to 3,838 tons, and that of the Moreni Co. to 3,200 tons. The International Co. has obtained in their Gura-Ocnitza property in January a production of 1,055 tons. Two new wells of the company at Moreni have recently become productive; while well No. 14, situated near the company's famous well, No. 1, has also touched an oil bearing sand. The output of the company has, in consequence, increased to a very considerable extent.

ACTIVITY IN PETROLEUM PROSPECTING IN CHINA.

The governor of the province of Shensi has determined to work the petroleum fields in that province, which are believed to be rich. He has submitted a memorial reporting the work already accomplished and the arrangements made for the building of a railroad in connection therewith. The memorial deals with three points :—

Firstly, the test of quality of petroleum. In the Yench'ang-hsien of the province there is a petroleum well which was recovered from the German merchants by the former Governor Sheng Yun. But, owing to the difficulty of obtaining mining engineers, the work has been delayed. Soon after the arrival of the memorialist a deputy was sent with a sample to Hankow, where a Japanese engineer, Mr. M. Abe, was engaged to come to Shensi to test the oil. It has been proved that the oil is of the best quality and the source a rich one. Purified it gives an extraordinary light, which is said to be better than that of Japanese oil, and equal to that produced by American. In the neighbourhood of Yench'ang there are several other districts where petroleum is found, and it seems they are all from the same source. When the work at Yench'ang has been successfully established an extension of the working will be arranged.

Secondly, the estimate of cost. The expense for working petroleum is different from that of other minerals. It is estimated that seven-tenths is required for machinery, and three-tenths for sinking the shaft, then no further large capital is necessary. After the completion of the shaft the cost of obtaining every picul of oil, including labor, instruments, chemicals, tins and wooden cases, will be 1,500 to 1,600 cash, thus a sum of 100,000 or 300,000 taels will be sufficient for the working capital.

Thirdly, the arrangement for the line of transportation. Mr. Abe, the Japanese engineer, has been ordered to go with samples to Hankau for the purchase of machinery, and he is to return within 50 days to superintend the construction of the factory and shaft. At the same time arrangements will be made for the building of a road at Peishan, for the purpose of transporting machinery to and bring the oil from the mountain. The road in the mountains to the south of Yenchang is rugged; it is thought that a light railway from their to the Yellow River will be worth while, but this can not be built in a day. The road to the north of the provincial capital has been opened to Tungkuan ; from there to Yenchang is 600 li. With the exception of Chinsokuan, the earth is workable. Officials have been deputed to estimate the cost for the building of the road by sections. Men of the field force have been ordered to give assistance in the work. It is expected that upon the arrival of the machinery the building of the road and the factory will go on and be completed.

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In Contra Costa County.—Considerable progress is being made with the deep well of the American Oil and Refinery Co. in Contra Costa county. It has now reached a depth of nearly 3,000 feet, and is still in shale. An oil of a high-grade character has been encountered, and production could already be obtained if only the water were shut off.

RUSSIAN NOTES.

Case Works Re-open.—The Siderides case oil works were to resume working last Monday, as the result of an agreement with the workmen.

On the 16th March, the starting of work was expected in the benzine distilling section of the refinery of the Ferghana Petroleum Co. at Tchimion, in the Ferghana province of Russian Central Asia.

Strike at Nobel Bros.—The Mohommedan workmen of Nobel Bros. at Baku are out on strike. A meeting of petroleum producers has been held at Baku with a view to bring about a settlement, but the result is still unknown.

Exporters' Difficulties.—The interruptions in the working of the kerosene pipe line have placed the exporting firms in a difficult position owing to their inability to load chartered steamers for want of supplies of oil. The exporters are now endeavouring to get their kerosene through tank waggons from Baku.

Baku Crude Oil Production.—The production of crude oil at the Baku oil fields in February, according to a telegram just received, amounted to 30,780,688 poods, of which Bebe-Aibat contributed 10,085,445 poods. The production by spouters in February did not exceed 54,500 poods, the whole being obtained at Ramany.

Rates for the Carriage of Petroleum Products.—Negotiations have now been completed between Nobel Bros. and the Volga shipowners regarding the rates for carrying petroleum products on the Volga in the coming navigation on the Volga. The rate has been fixed at 5¾ copecs per pood to Nijni-Novgorod, insurance for account of shipper. Other ports according to the usual calculation.

Custom Statistics.—According to the official customs statistics the exports of petroleum products through the various customs on the Russian frontier in 1905, compared to 1904, were : —

	1905. Poods.	1904. Poods.
Light illuminating oil (kerosene, heavy benzine, etc.)	39,279,000	83,582,000
Including *via* Batoum	28,358,000	61,484,000
,, Novorossisk ..	9,646,000	20,330,000
,, Wargaw	211,000	468,000
Not including *via* Baku	1,480,000	1,340,000
to Finland ..	1,757,000	1,687,000

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TO FACILITATE THE ROUMANIAN EXPORT TRADE.

With a view to facilitate the development of the petroleum export trade, the Roumanian Government have, as our readers are aware, erected at Constantza the principal seaport of Roumania at the public cost, a complete installation for the storage of petroleum products fully equipped for receiving the oils which are brought up from the refineries in tank waggons, and the loading of the same in tank steamers. This installation, which is being constantly enlarged according to the needs of the industry, now contains 16 tanks, each of a capacity of 5,000 cubic metres, or 1,200,000 gallons The arrangement for receiving the oil are such that two trains of 25 tanks' waggons, each can be discharged simultaneously in an hour and a half, whilst three tank steamers of 5,000 tons each can be loaded simultaneously in 24 hours. The advantages which this installation has conferred on the petroleum industry are enormous, and all the more important petroleum firms have rented tanks for a period of 25 years, putting down a certain amount of money as guarantee that the tanks will be continuously in use during the whole period of the lease.

AMERICAN OIL FIELDS DURING FEBRUARY.

DETAILS OF OPERATIONS.

The details of operations in the Pennsylvanian Mid-Continent American fields for February are just to hand, being published in the *Oil City Derrick* with the customary care for accuracy which is one great characteristic of that journal. Though the month was the shortest in the year, more wells were completed in the Pennsylvanian fields than in the first month of the year, while the production shewed a slight gain. There was, however, no change in the general situation to warrant any hopes for an increase in the present supply of oil. No gusher strikes were in evidence anywhere, and the chances for their discovery are all the time diminishing. In the search after natural gas, large areas of possible oil territory have been condemned, and there is no longer room for any oil pools save of very limited extent. The wildcatter hesitates about taking chances in the deep sand territory of the South-west, where a dry hole is the most costly kind of an investment.

There is nothing, continues the *Derrick*, in the present outlook to encourage operators to rush the drill, and the absence of any new territory of the first class renders it impossible to expect any increase in the present yield of oil in the Pennsylvania variety. The complaint of the scarcity of desirable oil producing territory is not confined alone to the Pennsylvania regions; similar conditions likewise prevail in the Lima oil districts of North-western Ohio and Indiana.

The greatest increase during the month was in the producing sections of West Virginia and South-eastern Ohio. In the older portions of the field there was a general disposition apparent to curtail operations. In the Bradford field, only 10 new wells were completed in February. Allegheny completed the same number of productive wells during the past two months, but the dry hole list shewed an increase in February.

South-west Pennsylvania attracted more than ordinary attention during February, consequent upon the new development near Burgettstown, in Washington county.

The new wells in this pool averaged 36 barrels each, and there were no dry holes discovered during the month. Of the 44 wells completed in the entire district, three were gassers and 11 dusters, leaving 30 new wells with an average yield of about 12½ barrels. In January, 26 wells were completed, including seven dry holes and gassers, and the average yield was very nearly the same.

Of 136 wells completed in the West Virginian oil districts in February, 58, or nearly 43 per cent., were credited to the unproductive list. The new wells had a daily yield of about 15 barrels. No gusher strikes were recorded, and the field work is generally of the routine order. A decline in new operations was registered in the West Virginia districts during February.

In South-eastern Ohio, nine more wells were completed than in West Virginia during the past month, and the new production was 140 barrels smaller. The productive wells were 94 in number, and averaged about 11 barrels each. Woodsfield is at present the most attractive district in South-eastern Ohio, and some very desirable wells are being found there. Thirty per cent. of the wells completed in South-eastern Ohio were unproductive in January. South-eastern Ohio completed two more wells than West Virginia in December, and its new production was 666 barrels greater.

In the Lima oil fields of North-western Ohio and Indiana 236 wells were completed in February, including 28 dusters, and the new production amounted to 2,262 barrels. This was an all round decrease of 38 wells completed and 815 barrels production. The dry holes were a stand-off for each month.

On February 28 the Trenton Rock field operations were composed of 159 rigs and 276 wells drilling. This was a gain of nine rigs and a loss of 20 wells drilling, making a net decline of 11.

Wolfe and Wayne counties in Kentucky contain the only sections of the Kentucky and Tennessee oil fields that are attracting the attention of operators. Thirty-three wells were completed in February, including eight dry holes, and the new production amounted to 440 barrels. These figures are very close to those of January, representing a gain of one well and a loss of 25 barrels new production.

In the Trenton Rock oil fields of North-western Ohio, 140 wells were completed in February, the new production was 1,160 barrels and there were 16 dry holes.

On the last of the month there were 85 rigs and 160 wells drilling under way in the Buckeye oil fields, which was an increase of 10 rigs and a decrease of 21 wells drilling from the figures at the close of January.

Only 96 wells were completed in the Indiana oil developments in February, including 12 dry holes, and the new production amounted to 1,102 barrels. This was a decrease from January of 41 wells completed and 734 barrels production.

There were 74 rigs and 116 wells drilling in the Hoosier oil districts at the close of February, which was almost an exact stand-off with the record for January 31, when the field contained 75 rigs and 115 drilling wells.

There were 349 wells completed in the Mid-Continent oil fields during February, of which 55 were dusters and 40 gassers. Compared with January this represents a decrease of 42 wells completed and 1,971 barrels production and an increase of six dusters and 13 gassers. There was likewise a drop in field operations, the count shewing 23 rigs and 150 wells drilling at the close of the month, which was a decline of 10 rigs and 47 wells drilling from the figures of the previous month.

In the Kansas oil fields 64 wells were completed, including 14 dry holes and 23 dusters, and the new production was only 528 barrels, which was an average of 19½ barrels to the well. In the Territory oil fields the average was much larger. Oklahoma and the Indian Territory completed 285 wells in February and the new production was 11,485 barrels. Of the wells completed 41 were dusters and 17 gassers, which left 227 productive wells which averaged over 50 barrels to the well. The average for both the Kansas and Territory sections was 47 barrels.

THE CLIPPENS OIL LITIGATION.

The First Division of the Edinburgh Court of Session this week gave judgment in the litigation between the Clippens Oil Co , Ltd., and the Edinburgh and District Water Trustees, which has been proceeding for twenty years. In March, 1897, the Water Trust obtained interim injunction against the Clippens Co. preventing it encroaching upon the strip of ground running through the company's mineral field bearing the Trust's water pipes, and also against working the minerals in the lands of Straiton and Pentland at any point within 40 yards of the pipe tracks. The company, averring that its works were closed compulsorily from 18th March until February, 1898, when the interdict was recalled, claimed £157,000 damages. In defence, it was stated that the works were closed voluntarily, and that the interdict caused no loss.

Lord Pearson awarded the company £15,000 and expenses, and the First Division increased the damages to £27,000.

THE UNION OIL COMPANY OF CALIFORNIA.

ANNUAL REPORT.

The annual report of the Union Oil Co. of California has just been issued, and forms a very interesting document. The statement of the manager of the manufacturing, sales, and marine department—Mr. J. Baker, Jr.—states that the percentage of increase in barrels of oil delivered on sales during the past year was 49 per cent. in excess of that for 1904. He then proceeds :—

" Our sales have vastly increased, all branches shewing a nice margin over previous years' marketings. The tonnage of asphaltum produced and sold greatly exceeds all previous annual records—the only unsatisfactory feature about the business has been the abnormally low prices obtained for both oil and asphaltum, occasioned by keen competition.

" The writer, during the past year, canvassed the markets of Europe, as well as the Eastern States of this country, and, indeed, a trip to Panama, travelled over 50,000 miles, everywhere meeting with substantial encouragement.

" Concessions have been obtained, permitting us to lay pipe lines across the Isthmus of Panama, which will enable us to supply the demand for refined crude and fuel oil in the Atlantic States of America, Europe, and along the eastern coast of South America.

" The four large first-class tank steamers ('Lansing,' 'Roma," 'Washtenaw,' and 'Argyll'), which have been added to our fleet of oil carriers, increases our water transportation fully five times, enabling us to reach out for the markets of the world.

" The first California petroleum delivered in any South American port was sold by this company, and deliveries were commenced November last. We have secured considerable other business, some of which is in Central America, and we will begin shipments as soon as necessary storage plants can be provided.

" The enlargement of our refinery at Oleum (San Francisco bay) has been commenced—every branch of the plant, including still capacity, tankage, and docking facilities, will be materially increased, and we will shortly be in a position to produce refined oils of all classes and asphaltum in the quantities required.

" The construction of the pipe line across the Isthmus of Panama, further enlargement of our fleet of tank steamers, increasing of our refining capacity (all of which we accomplished this year) will enable the company to further materially increase its business, enhance its prestige, and benefit its stockholders."

Since the above report was written, the Union Steamship Co. has purchased a one-half interest in and chartered for ten years the steamers " Minnetonka " and " Minnewaska." These will at once be converted into tankers, thus giving the company a fleet of nine vessels, having a total carrying capacity of about 270,000 barrels. It is expected that these vessels will all be in commission by the middle of the year, and will largely increase the output of oil from the company's wells, many of which have been shut in during the past year by reason of insufficient transportation facilities for the oil. The improvements in the refinery referred to contemplate an increase to five times the present capacity of the plant at Oleum.

The manager of the executive and field departments states that drilling has been confined almost entirely to Santa Barbara county, where the company has brought in a number of very good wells. They have drilled in the aggregate upwards of 60,000 feet during the year, and have materially increased the production ; to what extent, however, they are unable to report, for the reason that the majority of the wells brought in have been shut down as soon as completed, there being no available outlet for their output.

The work accomplished in this line by the company during the past year is in excess of anything it has accomplished in the past during any similar period, and he does not hesitate to say that their forces are better organised and better equipped at the present time to carry on this line of work than they have ever been.

Proceeding, he says :—In the pipe line division, we have completed our six-inch line in Santa Barbara and San Lonis Obispo counties to Port Harford, with feeders extending to all the new wells, duplicate pumps and boilers at Orcutt and Summit, and steel tankage to the extent of over 250,000 barrels, and are therefore in a position to transport economically large quantities of oil from the field to tidewater.

In Southern California we have more than doubled the capacity of our Whittier-Fullerton-San Pedro-Los Angeles line by replacing the four-inch line with six-inch, and putting in additional pumps and boilers. They have also added materially to their storage equipment there.

DETAILS OF BAKU PRODUCTION.

The following are the detailed figures of the production of the Baku oil fields in September, 1905, as published in the current issue of the *Neft'anoye Dielo* :—

		PRODUCTION (in poods).				
	Number of Wells in Exploitation.	By Baling.	By Spouters.	Casual.	Total.	Average per Well per Day.
Balakhany	54	209,358	—	—	209,358	459
Saboontchi	37	105,175	—	6,164	111,339	285
Ramany	16	1,261,348	—	—	1,261,348	3,446
Bebe-Aibat	34	524,302	—	—	524,202	1,323
Total, September, 1905	141	2,100,083	—	6,164	2,106,247	1,323
,, August, 1905	1,557	30,684,406	1,369,700	279,606	32,333,712	1,027
,, September, 1904	1,581	52,008,349	1,834,100	247,790	54,090,239	—

The above figures shew the great reduction in the number of producing wells, and consequently in the output, caused by the August fires and riots. The losses sustained by each field separately are clearly shewn in the following table :—

	Number of Producing Wells before the Riots in August.	New Wells Completed in September.	Wells taken out of the producing list in September.	Number of Producing Wells at end of Sept.
Balakhany	610	—	556	54
Saboontchi	549	—	512	37
Ramany	179	2	165	16
Bebe-Aibat	185	—	151	34
Total	1,523	2	1,384	141

The American Oil Market.

New York, Week ended March 10th.

The reports from the principal producing sections during the past week shew about an average number of completions, and there is said to be more new work under way, though most of this is in the vicinity of the several large wells reported during the past few weeks. Operators do not appear disposed to extend development work far in advance of what is regarded as defined territory, and the result may be a decrease in the percentage of dry holes, but during the past week wells of this class have been in unpleasant evidence, probably one quarter of the completions proving devoid of oil. Only a few of what may be classed as large wells were reported, while the great majority have been small pumpers, and it is questionable if the average production of the new wells has been better than was the average of the February wells—barely seven barrels per well. With the return of spring and good roads some operators say the search will be renewed with energy. The demand for crude of high grade is not diminishing notwithstanding the stocks in the mid-continent fields are increasing. Within the past few years there have been many efforts made to locate new pools outside of the old producing districts, says the *Oil, Paint and Drug Reporter*, but they have in every instance proved futile. There has been considerable wildcatting far in advance to the south-west and nothing better has resulted but the discovery of light gas territory. Confronted with failures, there is nothing left but to search for small pools or extensions to the old fields. In the mid-continent fields, operators are disposed to curtail new work and await better facilities for marketing the product, but still the production necessitates constant increase in storage facilities. In Texas development work has also slackened off somewhat, and prices is decreasing. The prices now quoted for Texas crude are :—Batson 29@33c., as to gravity; Humble, 35c.; Saratoga, 32c.; Sour Lake, 34@41c., as to gravity; and Spindle Top, 45c.

REFINED AND PRODUCTS.—The demand for refined for export has been somewhat better during the past week, and as conditions abroad continue favourable, the export movement may be expected to continue of goodly proportions. The engagements during the past week have exceeded 200,000 barrels, all for shipment in bulk.

The price for barreled oil has remained steady at 7·60c. for New York loading, and at 7·55c. for Philadelphia loading. The principal foreign markets are steady. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. 3d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export have been in light request, and sales of about 150,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in fair request, and sales of about 40,000 barrels are reported. Pennsylvania crude is quoted at 7·60c. in barrels.

Crude naphtha continues steady. For export, sales of about 25,000 barrels have been reported.

CLOSING QUOTATIONS.

CRUDE.		Week ended Mar. 3. 1906.	Mar. 10. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4·70	4·70
Residuum, bbls for export	.. ..	6@6½	6@6½

CRUDE AT THE WELLS.

The quotations for oil represented by credit balances were :—

	Week ended Mar. 10. 1905.	Mar. 10. 1906.
Tiona	1·54	1·68
Pennsylvania	1·39	1·58
North Lima	0·93	0·94
South Lima	0·88	0·89
Indiana	0·88	0·89
CANADIAN OIL :		
Petrolia	1·33	1·34

REFINED—FOR EXPORT.

		Week ended Mar. 3.	Mar. 10.
Cargo Lots for export	per gal.	7·60	7·60
In bulk		4·70	4·70
Philadelphia loading		7 55	7 55

REFINED IN CASES—110 FIRE TEST.

	Week ending Mar. 3.	Mar. 10.
5,000 to 10,000	10·35	10·35
1,000 to 5,000	10·50	10·50

REFINED—JOBBING LOTS.

In barrels, pkgs. included.

		Week ended Mar. 3.	Mar. 10.
120 fire test, S.W.	per gal.	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

NAPHTHA AND GASOLENE.

	Week ending Mar. 3.	Mar. 10.
Naphtha, crude, car lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	17	17

PENNSYLVANIA OIL RUNS from Mar. 2nd to Mar. 7th were:—Mar. 2nd, 68,601; Mar. 3rd and 4th, 80,555; Mar. 5th, 32,966; Mar. 6th, 53,877; Mar. 7th, 61,436. For the month of January, 2,223,928.

THE DELIVERIES OF PENNSYLVANIA OIL for the same dates were:—71,415; 104,017; 78,685; 70,693; 75,421. For the month of January, 2,374,247.

CHARTERS FOR THE WEEK.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended March 9th and from Jan. 1, were as follows :—

	Week.	Year.	1905.
Refined, barrels and bulk	231,300	2,152,100	1,666,200
Refined, cases	140,000	2,506,000	5,861,000
Crude, barrels and bulk	35,300	365,400	216,500
Crude, cases	—	65,000	50,000
Naphtha, barrels	25,300	82 900	127,000
Residuum, barrels	10,900	115,000	198,900
Lubricating, barrels	—	72,900	22,500
Total, barrels cde. eq.	453,610	4,696,188	5,060,539

CLEARANCES FOR THE WEEK.

During the week ended Mar. 9th, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows :—

	Week.	Year.	1905.
Refined	12,145,140	89,693,640	83,383,546
Crude	—	210,100	414,804
Naphtha	1,230,950	3,311,100	2,471,517
Residuum	—	—	2,744,915

EXPORT STATISTICS.

The total exports from the port of New York and from the United States have been :—

	Gallons.
From New York, week ended Mar. 9th	16,193,520
Total from New York, from Jan. 1, 1906	119,808,300
Same period last year	111,592,866
Increase	8,215,434
From United States, week ended Mar. 9th	24,809,946
Total from United States, since Jan. 1, 1906	215,383,454
Same period last year	189,540,157
Increase	25,843,297

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The "Review" Shipping List.

MARCH 22, 1905.

Specially Prepared for this Journal.

NOTE.—Except when otherwise stated the Vessels are Steamers.

(*The following abbreviations are used in this table:*—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Philadelphia	Sables d'Olonne	P. Reedy Island, Feb. 28
ALCHYMIST	Terneusen	London	Arr. Mar. 17
AMERICAN	Antwerp	New York	Arr. Mar. 16
APPALACHEE	SanFrancisco	Shanghai	Arr. Mar. 19
APSCHERON	Venice	Batoum	P. Consti'ple, Mar. 7
ARAL	Tyne	Philadelphia	P. Dunnet Head, Mar. 5
ARAS	Newport	Batoum	P. Gibraltar, Mar. 11
ARGYLL	Honololu	SanFrancisco	Arr. Mar. 2
ASTRAKHAN	Philadelphia	U. Kingdom	P. Dover, Mar. 21
AUGUST KORFF	Bremen	New York	P. Dunnet Head, Mar, 10
AUREOLE	Tyne	Nantucket	P. Dunnet Head, Mar. 6
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Tyne	—	P. Gibraltar, Mar. 17
BALAKANI	Manchester	New York	P. Brow Head, Mar. 12
BATOUM	Tyne	Port Arthur (Texas)	Arr. Mar. 16
BAYONNE	New York	Venice	Arr. Mar. 14
BEACON LIGHT	Penarth	Philadelphia	L. Mar. 4
BEME	Rangoon	Bombay	Arr. Mar. 2
BLOOMFIELD	Bremerhaven	Tyne	Arr. Mar. 13
BORJOM	Alexandria	Batoum	L. Consti'ple, Mar. 7
BRILLIANT	Hamburg	Philadelphia	L. Tyne, Mar. 14
BROADMAYNE	Cette	Kustendje	L. Constanti'ple, Mar. 16
BULLMOUTH	BalekPappan	Shanghai	Arr. Mar. 19
BULYSSES	Kustendje	Manchester	Arr. Tyne, Mar. 17
BURGERMEISTER PETERSEN	Stettin	New York	L. Tyne, Mar. 9
CADAGUA	—	—	In port, Bilbao, Feb. 21
CALCUTTA (Br. bq.)	Newcastle (N.S.W).	SanFrancisco	Arr. Feb. 17
CARDIUM	Singapore	Rotterdam	Arr. Mar. 2
CAUCASIAN	London	Philadelphia	Sp. Mar. 17, 49 N., 25 W.
CHARLOIS	Rotterdam	Philadelphia	L. Mar. 3
CHESAPEAKE	Tyne	Philadelphia	L. Mar. 13
CHESTER	Philadelphia	Antwerp	L. Mar. 8
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	BalekPappan	—	L. Mar. 14
COWRIE	Soesoe	Samboe	Arr. Mar. 20
CYMBELINE	Batoum	—	P. Galatz, Mar. 19
CZAR NICOLAI II.	Novorossisk	Rouen	P. Gibraltar, Mar. 19
DAGHESTAN	Batoum	Antwerp	Arr. Mar. 17
DAKOTAH	Hong Kong	San Francisco	Arr. Feb. 22
DELAWARE	Philadelphia	Liverpool	P. Del. Break, Mar. 8
DEUTSCHLAND	Rotterdam	New York	Arr. Mar. 16
DIAMANT	New York	Stettin	Arr. Mar. 14
ELAX	Melbourne	Sydney	Arr. Mar. 19
ELISE MARIE	Stettin	New York	L. Tyne, Mar. 3
ENERGIE	New York	Hamburg	P. Butt of Lewis, Mar. 19
ERIVAN	Antwerp	Philadelphia	Off I. of W., Mar. 17
EUPLECTELA	Philadelphia	—	L. Mar. 11
EXCELSIOR	Hamburg	New York	P. Dungeness, Mar. 20
EZIO	—	—	Coasting Peru
FRANCE MARIE	Philadelphia	Marseilles	P. Del. Break., Mar. 4
GEESTEMUNDE	Philadelphia	Copenhagen	L. Mar. 14
GENESSE	Philadelphia	Manchester	L. Mar. 8
GEORGIAN PRINCE	Tyne	Havana	Arr. Feb. 21
GOLDMOUTH	Cardiff	Singapore	P. Tarifa, Mar. 20
GRAFSTROGANOF	Cronstadt	Odessa	In Tyne, Jan. 20
GUT HEIL	Philadelphia	Havana	P. Del. Break., Mar. 8
HAINAUT (Dch.shp.)	Antwerp	Alexandria	L. Mar. 15
HARRY WADSWORTH	Port Arthur (Texas)	Liverpool	Arr. Mar. 10
HELIOS	Trieste	Constanti'ple	L. Syria, Feb. 24
HOTHAM NEWTON	Bremerhaven	Middlesbro'	Arr. Mar. 21
HOUSATONIC	Newcastle (N.S.W.)	SanFrancisco	Arr. Mar. 12
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Novorossisk	Piræus	Arr. Mar. 15
J.B. AUG. KESSLER	Port Arthur (Texas)	Rotterdam	Arr. Mar. 7
JAMES BRAND	Thameshaven	Tyne	Arr. Mar. 17
KURA	Philadelphia	London	Arr. Plymouth, Mar. 20
LA CAMPINE	Antwerp	New York	P. Scilly, Mar. 13
LA FLANDRE	Philadelphia	Ghent	L. Mar. 8
LA HESBAYE	Antwerp	Batoum	L. Const'ple, Mar. 11
LA MADALEINE	Antwerp	Savona	Arr. Mar. 14
LA VIGUESA	Marcus Hook	Vigo	Arr. Nov. 6
LACKAWANNA	Philadelphia	Calcutta	P. Del. Break, Mar. 8
LE COQ	Philadelphia	La Pallice	P. Reedy Island, Feb. 28
LOUTSCH	Barcelona	Novorossisk	L. Const'ple, Feb. 25
LUCERNA	Tyne	Batoum	P. Sagres, Mar. 19
LUCIFER	New York	Liverpool	Arr. Mar. 21
LUCIGEN	Tyne	Batoum	P. Dardanelles, Mar. 16
LUCILINE	Dunkirk	Philadelphia	Arr. Mar. 20
LUMEN	Tyne	Philadelphia	L. Mar. 18
LUX	Novorossisk	Rouen	P. Peniche, Mar. 17
MAKKAVEI	Odessa	Batoum	Arr. Mar. 18
MANHATTAN	Rotterdam	New York	Arr. Mar. 13
MANNHEIM	Rotterdam	New York	Arr. Mar. 15
MARGARETHA	London	Manzanilla	P. Barry Island, Feb. 21
MEXICAN PRINCE	Cienfuegos	London	Arr. Mar. 17
MIRA	Newport	New York	P. Barry Island, Mar. 3
MUREX	Shanghai	Tientsin	Arr. Mar. 11
NARRAGANSETT	New York	London	L. Mar. 9
NERITE	BalekPappan	Palembang	Arr. Mar. 12
NEW YORK	Southampton	New York	140 S.W., Brow Head, Mar. 18
OCEAN	Hamburg	Philadelphia	L. Feb. 27
ORANJE PRINCE	Ensenada de Mota	—	P. Dover, Mar. 20
ORIFLAMME	Rouen	Philadelphia	Arr. Mar. 4
OSCEOLA	Norfolk	Bluefields	L. Inagua, Feb. 22
OTTAWA	Vera Cruz	Philadelphia	P. Del. Break., Mar. 9
OURAL	Antwerp	Batoum	P. Finisterre, Mar. 15
PALEMBANG	Bangkok	Palembang	L. Jan. 10
PAULA	Tyne	New York	Arr. Mar. 18
PECTAN	London	Galveston	P. Southend, Mar. 20
PENNOIL	Tyne	Philadelphia	L. Mar. 10
PERLAK	Hong Kong	Palembang	L. Jan. 20
PETROLEUM	—	Gibraltar	Arr. Sept. 18
PHOEBUS	New York	Hamburg	P. Scilly, Mar. 21

Vessel.	From.	For.	Latest Date and Position.
PINNA	Manchester	Cardiff	Arr. Mar. 2
POTOMAC	New York ..	Tyne	In the Tyne, Mar. 21
PROMETHEUS ..	New York ..	London	Arr. Mar. 18
PRUDENTIA......	Port Talbot	Kustendje ..	L. Const'iple, Mar. 13
RION	Port Arthur (Texas)	London	L. Mar. 12
ROCK LIGHT	Barrow	Constant'ple	P. Peniche, Mar. 13
ROSSIJA	Novorossisk	Hamburg ..	Arr. Mar. 18
ROTTERDAM	New York ..	Rotterdam ..	Arr. Mar. 18
RUSSIAN PRINCE	New York ..	Havana	L. Mar. 4
SALAHADJI	Singapore ..	Sanga Sanga	L. Jan. 21
SEMINOLE........	Calcutta	Singapore & San Francisco	L. Feb. 17
SILVERLIP	Tyne	Port Arthur (Texas)	Arr. Mar. 20
SINGU	Bombay	Rangoon ..	L. Feb. 28
SNOWFLAKE	Hull........	Philadelphia	P. Dunnet Head, Mar. 15
SOPHIE	Novorossisk	—	At Malta, Mar. 17
SPONDILUS	Cardiff......	Singapore ..	Arr. Mar. 12
STANDARD	Tyne	Philadelphia	Arr. Mar. 18
STROMBUS	Bremerhaven	Cardiff	Arr. Mar. 21
SURAM	Batoum	London	L. Mar. 15
SUWANEE	New York ..	London	Sp. Mar. 13, 41 N., 50 W.
SVIET	Alexandria ..	Odessa	Arr. Feb. 16
TELENA	Singapore ..	—	L, Table Bay, Mar. 11
TEREK............	Manchester	Batoum	L. Mar. 21
TIFLIS............	Cette	Novorossisk	L. Mar. 13
TIOGA	Batoum	Liverpool ..	Arr. Nov. 25
TONAWANDA	New York ..	Batoum	Arr. abt. Mar. 16
TROCAS	Palembang ..	—	L. Singapore, Mar. 9
TURBO	Cardiff	Philadelphia	Sp. Mar. 16, 46 N., 34 W.
TUSCARORA......	New York ..	Calcutta	At Suez, Mar. 22
TWINGONE	Madras	Rangoon....	Arr. Feb. 21
VEDRA............	Hamburg ..	Tyne	Arr. Mar. 14
VILLE DE DIEPPE	Philadelphia	Dieppe	Arr. Mar. 15
VILLE DE DOUAI	Calais......	Dunkirk ..	Arr. Feb. 4
VOLUTE	BalekPappan	Palembang ..	Arr. Mar. 16
WEEHAWKEN....	Sumatra	Port Natal ..	Arr. Mar. 14
WILLKOMMEN ..	Stettin......	New York ..	P. Dunnet Hd., Mar. 14
WINNEBAGO (Late Kinsman)	Bombay	SanFrancisco	P. Galle, Feb. 10

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

March 23rd, 1906.

The price of Roumanian petroleum is lower by ⅛d. since our last report, the latest prices are as follows:—

Russian, 5¾d.; American, 6d.; Water White, 7½d.; and Roumanian, 5¾d.

LUBRICATING OILS.

The latest quotations are:—

American pale, £7 15s. to £9 10s.

American dark cylinder, from £7 10s.

American filtered cylinder, from £11.

Shellene, £5.

TURPENTINE.

There has been little business doing in American Turpentine during the week, and consequently prices are slightly lower, being quoted for Spot, and for a few months forward, 46s. 9d.

LIVERPOOL OIL MARKET.

March 22nd.

Refined oils are quiet, but sellers now quote 6½d. for Russian and 6⅝d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, March 22nd.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, March 22nd.

Standard White is quoted at 7·55.

RUSSIA.

Baku, March 20th.

Prices at Baku continue to advance, and crude oil is now quoted spot at 27½ copecs per pood; residuals for delivery during the coming navigation have been sold at 31 copecs. The market is in a very high strung condition, in view of the lack of available supplies. Residuals for delivery at Astrakhan are quoted 34 copecs. Kerosene is quoted in waggons 31 copecs; in ships, 29½ copecs.

BELGIUM.

Antwerp, March 17th.

The petroleum market is unchanged. Price of Standard White, spot, March, 19¾ francs; April-May, 20 francs.

GERMANY.

Hamburg, March 17th.

The kerosene market is weak. The price of American Standard White is 7·10 marks per 50 kilos.

ROUMANIA.

March 17th.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs. ...	3·35-3·40
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery ...	3·00- —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural...	20-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octroi tax of 12 fcs. per 100 kilos.

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
„ sp. gr. 0·720-0·725	8·00- 9·00
„ sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

Bombay, February 24th.

There has been no change in prices of Burma oils since our last report, but the tendency is firmer.

American, "Snowflake," 150 deg.	Rs. 6	0	2
„ Chester, 125 deg.	4	8	2
„ Monkey Brand, 125 deg.	4	2	2
Russian, "Anchor," 125 deg.	4	14	6
„ "White Camelia" brand, 125 deg. ..	4	0	2
„ "Rising Sun," bulk, in local made tins ..	3	14	0
„ "Elephant" brand, in local made tins ..	3	10	0
„ Bulk, in Bombay Bazaar, 125 deg. per 10 gallons..	3	3	0
Borneo oil in bulk	2	14	6
Burma Oil, in bulk, per 8 imperial gallons	2	11	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

FOR THE WEEK ENDED MARCH 20th, 1906.

Specially prepared for this Journal by . . . the Custom House.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Mar. 14	London	Humphrey and Co.	Minnehaha	140 brls.	Lub.	5,670	New York
,, 14	,,	A. Brown and Co.	Tampicon	120 brls.	,,	4,800	Philadelphia
,, 14	,,	G. and H. Green	Maine	85 brls.	,,	3,330	New York
,, 14	,,	A. Haacke and Co.	,,	35 brls.	,,	1,500	,,
,, 14	,,	London and India Docks Co.	,,	35 brls.	,,	1,400	,,
,, 15	,,	Scott's Wharf	Minnehaha	125 pks.	,,	4,000	,,
,, 15	,,	Anglo-American Oil Co	Prometheus	Bulk	Lamp	1,247,790	,,
,, 15	,,	G. W. Sheldon and Co.	Redstart	13 pks.	Lub.	630	Antwerp
,, 16	,,	Asiatic Petroleum Co.	Cardium	Bulk	Pet. Spirit	330,150	Pulo Samboe
,, 16	,,	Mordaunt Bros.	Tampicon	600 brls.	Lub.	24,400	Philadelphia
,, 16	,,	W. B. Dick and Co.	,,	100 brls.	,,	4,540	,,
,, 16	,,	Browning Petroleum Co.	Redstart	51 bls.	,,	2,190	Antwerp
,, 19	,,	G. W. Sheldon and Co.	Ptarmigan	11 casks	,,	550	,,
,, 19	,,	,,	Minneopolis	117 pks.	,,	930	New York
,, 19	,,	London and India Dock Co.	Maine	30 brls.	,,	1,500	,,
,, 19	,,	Union Lighterage Co.	Tampicon	135 pks.	,,	5,140	Philadelphia
,, 19	,,	W. Balchin	,,	600 brls.	,,	24,000	,,
,, 19	,,	Juett and Cain	,,	180 brls.	,,	7,200	,,
,, 19	,,	Scott's Wharf	,,	120 brls.	,,	4,800	,,
,, 19	,,	London Oil Storage Co.	Cressida	178 pks.	,,	2,280	Hamburg
,, 20	,,	Anglo-American Oil Co.	Tampicon	2030 brls.	,,	81,200	Philadelphia
,, 14	Liverpool	Meade-King, Robinson and Co.	Noordland	1089 brls.	,,	43,560	,,
,, 14	,,	E. Harrison and Co.	,,	250 brls.	,,	12,440	,,
,, 14	,,	Worthington and Boler	,,	130 brls.	,,	5,200	,,
,, 14	,,	Crew, Levick Co.	,,	545 brls.	,,	21,840	,,
,, 14	,,	G. B. Taylor	,,	1400 brls.	,,	56,000	,,
,, 14	,,	,,	Indore	525 brls.	,,	21,000	Baltimore
,, 14	,,	,,	Victorian	1791 brls.	,,	71,640	New York
,, 14	,,	Vacuum Oil Co.	,,	119 pks.	,,	3,560	,,
,, 14	,,	Meade-King, Robinson and Co.	,,	300 brls.	,,	12,000	,,
,, 15	,,	,,	Brescia	150 brls.	,,	6,000	Trieste
,, 15	,,	American Line	Noordland	20 brls.	,,	850	Philadelphia
,, 16	,,	Vacuum Oil Co.	Cevic	650 brls.	,,	26,000	New York
,, 19	,,	Liverpool Storage Co.	,,	1063 brls.	,,	42,420	,,
,, 19	,,	G. B. Taylor	,,	1116 brls.	,,	44,640	,,
,, 19	,,	A. Hopps and Sons	Carmania	60 brls.	,,	2,550	,,
,, 19	,,	Cunard Steam Shipping Co.	,,	3218 brls.	,,	128,720	,,
,, 19	,,	,,	,,	25 brls.	Min. Colz.	1,000	,,
,, 19	,,	Anglo-American Oil Co.	Terek	Bulk	Lamp	438,000	Philadelphia
,, 19	,,	,,	,,	Bulk	Gas	217,000	,,
,, 20	,,	Pickford's Ltd.	Rutland	39 pks.	Lub.	850	Hamburg
,, 20	,,	Penwarden and Jackson	Moorhen	6 brls.	,,	250	Antwerp
,, 15	Bristol	H. R. James and Son	Llandaff City	300 brls.	Min. Colz.	12,000	New York
,, 15	,,	W. Smith and Co.	,,	370 brls.	Lub.	14,800	,,
,, 15	,,	Pickford, Ltd.	,,	20 brls.	,,	800	,,
,, 15	,,	H. R. James and Son	,,	740 brls.	,,	29,600	,,

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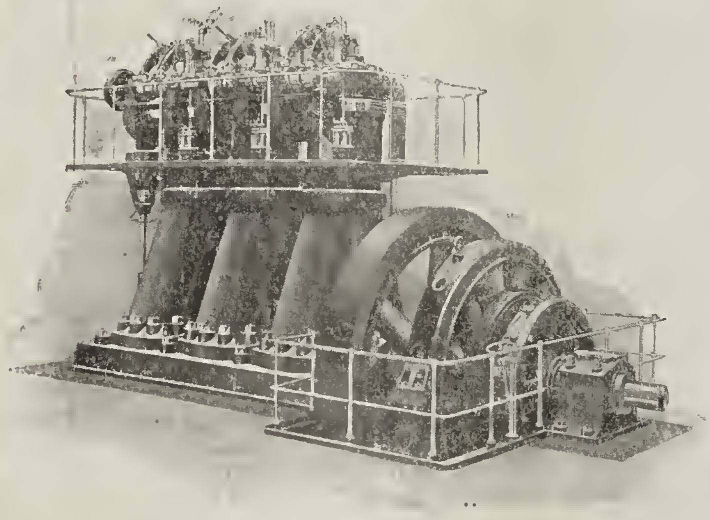

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QUALITY TELLS.

To Dealers only.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Mar. 15	Goole	Goole Steamship Co.	Nidd	30 brls.	Lub.	1,500	Antwerp
,, 16	Grimsby	J. Sutcliffe and Sons	City of Leeds	19 brls.	,,	760	Hamburg
,, 16	,,	,,	Drunham	12 casks	,,	360	Antwerp
,, 16	Hull	Helmsing and on	Zara	225 brls.	,,	9,000	Riga
,, 16	,,	T. Wilson, Sons, and Co.	,,	225 brls.	,,	9,000	,,
,, 16	,,	,,	Colorado	160 brls.	,,	6,400	New York
,, 16	,,	,,	Cito	39 pks.	,,	780	Hamburg
,, 16	,,	,,	Juno	15 pks.	,,	400	,,
,, 16	,,	,,	Otto	28 brls.	,,	1,120	Antwerp
,, 15	Manchester	Donald Currie and Co.	Pellworm	22 casks	,,	510	Hamburg
,, 15	,,	,,	Holnis	25 brls.	,,	1,000	,,
,, 15	,,	W. Hodgson and Co.	Camoens	69 brls.	,,	2,640	New York
,, 15	,,	G. B. Taylor	,,	2574 brls.	,,	102,960	,,
,, 15	,,	Liverpool Storage Co.	,,	320 brls.	,,	13,130	,,
,, 15	,,	Bramwell, Fern and Co.	,,	30 brls.	,,	1,220	,,
,, 17	,,	Anglo-American Oil Co.	Terek	Bulk	Lamp	438,000	Philadelphia
,, 17	,,	,,	,,	Bulk	Gas	217,000	,,
,, 19	Southampton	American Line	St. Louis	151 brls.	Lub.	6,040	New York
,, 15	Glasgow	Clyde Shipping Co.	Semla	45 pks,	,,	450	Antwerp
,, 16	,,	Anchor Line	Astoria	1145 brls.	,,	45,800	New York
,, 15	Grangemouth	W. G. Yooll and Co.	Coburg	50 brls.	Lamp	2,000	Hamburg
,, 15	Leith	Henderson and McIntosh	Vera	567 brls.	Lub.	22,680	Philadelphia
,, 16	,,	Graham Yooll and Co.	Weimar	50 brls.	Lamp	2,180	Hamburg
,, 17	,,	,,	Sardinia	50 brls.	,,	2,180	,,
,, 17	,,	J. Currie and Co.	,,	54 pks.	Lub.	640	,,
,, 15	Lerwick	H. Benicen	Olga	3 brls.	Lamp	90	Larvic
,, 16	Dublin	Anglo-American Oil Co.	Lucifer	Bulk	Gas	456,770	New York
					Net Total	4,315,350	

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO MARCH 20th, 1906.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.
Austria	—	874,560	6,000	207,990	—	11,000	—	—	—	—	—	—	—	—	6,000	1,104,550
Belgium	—	240	7,050	105,050	—	11,000	—	—	—	2,030	—	—	—	1,416	7,050	108,736
Borneo	—	210	—	—	—	—	—	—	330,150	1,849,150	—	240	—	—	330,150	1,849,600
Canada	—	—	—	8,000	—	20,000	—	—	—	—	—	—	—	—	—	28,000
Germany	6,360	726,130	7,220	391,690	—	—	—	—	—	2,320	—	—	—	4,980	13,580	1,135,120
Holland	—	—	—	920	—	—	—	—	—	973,730	—	98,200	—	11,640	—	1,084,490
Roumania	—	1,360,000	—	—	—	—	—	—	—	—	—	—	—	—	—	1,360,000
Russia	—	7,255,760	18,000	48,480	—	—	—	758,500	—	—	—	—	—	5,410	18,000	8,068,150
Sumatra, &c	—	—	—	—	—	—	—	—	—	930,000	—	—	—	—	—	930,000
U.S.A.	2,123,790	15,039,447	912,900	10,028,504	—	523,328	890,770	10,915,480	—	1,069,180	—	5,902,880	—	306,610	3,940,460	43,775,339
Other Countries	90	490	—	5,720	—	—	—	—	—	480	—	—	13,000	210,800	90	217,490
	2,130,240	25,256,837	951,170	10,796,354	—	565,238	890,770	11,673,980	330,150	4,826,890	—	6,001,320	13,000	540,856	4,315,330	59,661,475

BRITISH PATENT.

An Improved Automatic Extinguishing and Non-Leaking Appliance for Paraffin Lamps and the like.—James Locke and Thomas Richard Shercliffe, Burton-on-Trent, Stafford.

This relates to an automatic extinguishing and non-leaking appliance for paraffin lamps and the like, and consists in the combination of supported wires inclined to the vertical, rotatable about their geometric axes, and carrying at their lower ends weighted arms, and cranks or bends at their upper ends, with extinguisher flaps pivotted to the wick holder, or a sliding tube ther eon, one of these flaps being actuated by the bends of the upper ends of the wires so as to close when the lamp is tilted, and means connecting the two flats, whereby when the one ls actuated to close, the other is also closed.

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AMERICAN PATENT.

Device for Oil Well.—Henry Wilson, Emlenton, Pa.

The combination with a working barrel constructed in three sections, the intermediate section being perforated, of a plurality of working valves, a standing valve located below the lower of said working valves, a standing valve body located between said working valves, said valve body having a seat formed therein, a valve arranged in said valve body, a rod extending through said valve body and through the valve arranged therein and connected to said working valves and agitating means carried by said rod between the lowermost working valve and the said valve body, and adjacent to the perforated section of the working barrel.

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PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Spies Petroleum Co., Ltd.—The output for the week ended March 18th was 121,400 poods, or 1,958 tons.

Baku Russian Petroleum Co., Ltd.—The production for the week ended March 11th was 302,000 poods, or 4,870 tons. Details of last week's production are not yet to hand.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended March 18th was 238,000 poods, or 3,838 tons.

The European Petroleum Co., Ltd.—The production for the week ended March 18th, 1906, was 91,537 poods, or 1,476 tons.

The Petroleum Review.

By PAUL DVORKOVITZ.

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Editorial Notes.

A Week's Record Petroleum Shipments.

The present week has been a record one for the importation of petroleum, and its products into the United Kingdom, for they have reached a large total of almost 12,000,000 gallons. Only upon two occasions last year were such figures reached, and strangely enough, these occurred within a few weeks of each other. The weekly average for the year, however, was about 6,000,000 gallons per week, so it will easily be seen what a great increase the present week's imports constitute. The "Narragansett," the "Delaware," and the "Prometheus," have each brought large cargoes to London during the past few days, the former tanker carrying no less than 3,000,000 gallons of lubricating oil from New York. The two latter mentioned vessels have each brought illuminating oil from America, this amount likewise being approximately 3,000,000 gallons. The imports of benzine are increasing at a remarkable rate, consequent upon the developments which this country is witnessing in the motor industry, and for the week nearly 2,000,000 gallons of spirit have arrived.

Death of Ex-Governor Hogg.

Readers of the Review, especially those on the other side of the Atlantic, will regret to hear of the decease of Ex-Governor Hogg, the sad event having taken place at Houston, Texas. He was one of those gentlemen who figured so prominently in the early developments of the Beaumont and other Texas fields, from which it is said that he amassed a not inconsiderable fortune. It will be remembered that some years ago the Ex-Governor received injuries while travelling upon one of the American expresses, eventually suing the company for one hundred thousand dollars damages. An operation failed to restore his health, and at the time of his death — which was quite unexpected—he was *en route* to the Sanitorium at Battle Creek. The career of the ex-Governor is an example of the success which is the reward of perseverance and untiring energy. When a boy he worked for a few shillings per week upon a farm, and while in his teens was appointed to the office of road overseer. Then he found time to study law, became a Justice of the Peace, a Member of the Legislature, and at a later period was Attorney-General and Governor.

Census of the American Petroleum Industry.

A census of the American petroleum industry for 1905, undertaken toward the end of last year by the Census Bureau at Washington, forcibly illustrates the growth which is the chief characteristic of this branch of American commerce. The statistics embrace the returns from the year 1900 to 1905, giving the number of establishments, the value of the product, the salaries received by wage earners, and other matters of interest. In 1905 it would appear there were ninety-eight petroleum refining establishments in the States, as compared with sixty-seven in 1900. The capital invested increased from $95,327,892 in 1900 to $136,280,541, an increase of 43 per cent., while the total value of the product increased from $123,929,384 to $175,005,320, an increase of more than 41 per cent. An average of 16,771 wage earners were employed in 1905, as compared with 12,299 five years earlier. The wages paid jumped from $6,000 to nearly $10,000, a gain of 48 per cent. Last year there were 1,974 salaried officials, who were paid salaries aggregating more than $2,724,000. Compared with the figures for 1900, this was an increase of 64 per cent. in number, and an increase of 50 per cent. in the amount paid them. The value of the materials used in 1900 was $102,000,000, as compared with $139,000,000 in 1905. We must compliment the Washington Census Bureau upon the early announcement of these interesting statistics.

The Latest from Russia.

From Batoum comes the news that the pipe line is again working with frequent stoppages lasting several days, and so, in consequence of this, the railway has not been able to deliver to the exporters the balance of oil due to them out of the two per cent. allowance for leakage, whilst under the present circumstances the delivery of this oil would have been very useful to the exporters. At the same time, local people are much astonished at the prices at which the little oil now on the market is disposed of. Notwithstanding the great shortage, the prices realised are not more than 48 copecs f.o.b. Batoum. At the very height of the oil famine, when kerosene at Baku was quoted at 45 copecs, the stock of the refiners' syndicate was sold at 49 copecs per pood. It is clear that the foreign buyers of oil at Batoum have fixed a limit for prices, beyond which they will not go. It is also apparent that the excessive rate of transport falls not on the foreign buyers, but on the Russian producers and exporters. Now, with the opening of the Baku-Batoum pipe line, it would be well for the Government to bear this fact in mind, and give the exporters the benefit of the difference between carrying the oil by rail and pipe line.

American February Pipe Line Report.

We learn from the monthly statistics published in the *Oil City Derrick* that the runs of Pennsylvania oil during February fell below 70,000 barrels per day; in other words, they were the smallest on record for over sixteen years. During that same period the shipments likewise shewed a decrease, but exceeded the runs by over 4,000 barrels daily, so that there was a large decline in the stocks. In the Lima fields, the runs also revealed a large decline, while owing to the shipments being increased, the drain upon the stocks amounted to no less than 500,000 barrels. In the mid-continent fields, however, a very different state of things existed, and, as the statistics upon another page bear out, stocks continue to increase at an enormous rate. In fact, at the close of the month they amounted to no less than 15,000,000 barrels, and thus equalled the entire stocks held by the various companies in the Pennsylvania and Trenton Rock fields. The average daily pipe line runs for Pennsylvania oil for February were roughly 70,000, being somewhat under those for the preceding month. The shipments amounted to about 74,000 barrels daily, and were over 2,000 barrels less than the daily average for January. It will thus be seen that conditions in the high-grade producing districts of America are far from satisfactory.

OPERATIONS OF ROUMANIAN REFINERIES IN JANUARY.

The operations of the Roumanian refineries are shewn in the following official figures. The quantity of crude oil treated at the refineries in January was 60,123 tons. The output of various products was as follows :—

	Tons.
Benzine	8,712
Illuminating oil	18,439
Lubricating oils	2,952
Residuals	27,787
Total	57,890

The quantities of various oils delivered from the refineries in January for home consumption were :—

	Tons.
Benzine	40
Illuminating oil	3,168
Lubricating oils	289
Residuals	15,553
Total	19,050

The stocks on the 31st of January were :—Benzine, 20,164 tons; illuminating oil, 39,635 tons; lubricating oils, 8,623 tons; residuals, 65,141 tons; total, 133,563 tons. The output of paraffin scale in January was $55\frac{1}{4}$ tons.

OIL FREIGHTS ON THE VOLGA.

Messrs. Nobel Bros. have concluded their contracts with the Volga shipowners for the transport of their oil during the ensuing period of navigation. The rate has been fixed at $5\frac{3}{4}$ copecs per pood from Astrakhan and Nijni-Novgorod, which is one copec per pood higher than last year. On the other hand, the shipowners have $13\frac{1}{2}$ copecs per pood more for their fuel, and a careful calculation shews that the shipowners are really the losers against last year's rate to the extent of 0·35 copecs per pood. Further, this year the insurance of the cargo falls entirely on the shipowners, whilst last year it was halved, and this increases the difference to the disadvantage of the shipowners to 0·55 copecs per pood.

The usual advance to the shipowners on account of freight is this year withheld, and the first payment to the shipowners is to be made not before August. The allowance for leakage remains the same. The total amount of the contracts this year is 40,000,000 poods.

MR. JOHN WATTS AND THE HOMELIGHT OIL COMPANY.

Our English readers will be particularly interested to hear that Mr. John Watts, branch manager at Hull for the Homelight Oil Co., Ltd., has recently resigned his position which he has so well filled for the past four years, and commenced business on his own account under the style of Messrs. John Watts and Co. During the period that Mr. Watts was with the Homelight Oil Co. he earned for himself a good name among all with whom he came into contact, and now that he has determined to "steer his own canoe" there is every reason to hope that that success which he has met with in the past will accompany him during the future.

By way of placing upon record their appreciation of his services, the representatives and office staff of the Hull branch met on Saturday last, and presented Mr. Watts with a roll top desk and Mrs. Watts with a silver fruit stand. Mr. Watts has been appointed the agent for Meade-King, Robinson and Co.

LATEST FROM THE WIETZE OIL FIELD.

Our German contemporary *Petroleum* mentions the following particulars concerning the latest boring operations at Wietze, in Hanover. The Deutsche Tiefbohr Actiengesellschaft has struck oil in one of their bore holes at Baimetze, and also in two bore holes at Steinfoerde. On the other hand, the Hanoversch-Westfallische Erdoelwerke Co. has discontinued their well at Wietze, situated opposite the property of the Erdoelbohrgesellschaft Wietze-Koeln. New borings have been started—one by the Erdvelwerke Wietzendorf on their Hermann plot and one on a plot adjoining it. The Deutsche Tiefbohr Actiengesellschaft has started one well on the Teufelsuisel plot. The Celle-Wietze Co. has started two borings on the river Aller, at its juncture with the Wietze. The Wietze Hanover Co. has also laid down one new well.

PERLAK PETROLEUM MAATSCHAPPIJ.

At a recent meeting of this Dutch company, it was resolved to pay a dividend of 6 per cent. for 1905 on those of the B shares which are not paid off, whilst the A shares are to receive an additional dividend of 20 per cent. Those of the A shares on which 55 per cent. has been paid back will receive 2·7 per cent. as dividend, and 20 per cent. on account of repayment of capital, or in all 22·7 per cent., against 24·95 per cent. last year. There will still be 25 per cent. of the capital of A shares remaining unpaid.

The Closing of the Batoum Case Oil Works.

(Concluded from page 224.)

Of all the materials used for the cases, the most important ones are tin plates and timber. The first come exclusively from England, which country in this respect is above all competitors, and supplies the whole world, the American case manufacturers included. In regard to timber, certain changes have occurred in the sources of supply since the report of the committee from which we have been quoting was written. Austria has lost its preponderance in the quantity supplied, which has gone over to Russian firms. Thus, for instance, the saw mills of Mr. Rabinovitch at Kherson have increased the quantity supplied by them to 4,000,000 cases per annum. The saw mills of Mr. P. Spolianski, on the Russian side of Reni, which receive their timber from Roumania, duty free, have likewise increased their supply to 1,000,000 cases at the expense of the Austrians. The supply of case timber from Czaritzin, on the Volga, from the saw mills of Messrs. Maximoff, *via* Rostoff and Novorossisk, after the delivery of trial quantities to the extent of 1,500,000 cases, had to be discontinued in consequence of the unprofitable nature of the business, owing to the great distance and inability to compete with other suppliers. The same firm of Maximoff has, however, for the last six years been supplying on the average about 1,000,000 cases per annum from their Kodor saw mills on the Caucasus. The Kerasund saw mills, situated about 50 miles to the south of the town of Kerasund, in the forest clad mountains of Kulak-Kai in Turkey, have been supplying timber to Batoum in small quantities not exceeding 100,000 cases per annum, and in 1903 ceased entirely, apparently preferring other markets to Batoum. It may be mentioned here, by the way, that the Kerasund timber was of a far superior quality to any other supplied to Batoum, not excluding the one coming from Galatz. A new supplier, who is not mentioned in the official report of the committee, is Mr. G. I. Serebriakoff, who supplies timber from the Swanoti forests at the springs of Zchenis-Zkali River, within a comparatively short distance of Batoum. This timber is floated down the above-mentioned river to the saw mills at Satchilavo, near Sarntredi station, on the Transcaucasian Railway. The quantity of this timber supplied to Batoum annually scarcely reaches 200,000 cases.

In order to clearly shew the changes which have occurred in the supply of this most important material, we give below the approximote quantities of timber (in cases) supplies from different sources during the last five years :—

The figures in the table are based on data supplied by the Batoum representatives of the respective supplying firms, and may be inaccurate to the extent of 8 or 10 per cent. one way or the other. These figures shew, nevertheless, that Austria's share in the supply of timber to Batoum, from two-thirds of the total quantity declined to one-half and less, to the advantage of Russian firms, and this change began with the imposition of and later with the increase in the import duty on foreign timber imported into Batoum.

It will be remembered that, under the Treaty of Berlin, Batoum was declared a free port, which position it enjoyed right up to 1886, when it was abolished by the Russian Government, and import duties imposed on all foreign goods according to the general tariff. The timber for cases, however, even after 1886, continued to enjoy the privilege of duty free importation, as the Government rightly considered it necessary for the development of the case oil export trade, and to enable it to sustain the competition of the Americans, and this continued up to 1893. The price at Batoum of a case, or, to be more correct, the timber—for a case did not then exceed 50–52 centimes or five pence, which should have been considered as profitable both to foreign and Russian suppliers. The Russian suppliers, however, not satisfied with the profits made in open competition, demanded from the Government the imposition of an import duty on foreign timber coming to Batoum with a view to encourage home industries. The Government yielded to these demands, and from the 1st of March, 1893, a duty of nine copecs per pood, which works out at 3 copecs per case, was put on foreign timber coming to Batoum. This was the first burden placed on the shoulders of the Batoum export trade, and paved the way for future crises, and at the same time placed the first trump card in the hands of the Americans. This, however, was not enough, and when in 1900 the duties on all European goods were advanced by 30 per cent. to cover the cost of the war with China following upon the Boxer rising, the duty on timber was also advanced to 11·7 copecs per pood, which worked out at 3½ copecs per case. After the duty on timber came into force, the Russian suppliers promptly raised the price of their timber from 19 copecs to 22 and 24 copecs per case.

The result of this was—firstly, the Russians began to make on their timber 3½ copecs more profit per case than before the duty was imposed; secondly, the foreign suppliers continued to sell their timber at 52 centimes or 19 copecs per case, making the case manufacturers pay the duty. As to their loss of 2,000,000 cases in trade,

Origin.	1901.	1902.	1903.	1904.	1905.	Total.
Galatz (Baron Popper and others)	5,720,000	3,600,000	5,000,000	4,500,000	1,160,000	19,980,000
Kherson (Mr. Rabinovitch)	4,220,000	3,480,000	4,000,000	4,750,000	750,000	17,200,000
Kodor (Messrs. Maximoff)	1,500,000	1,500,000	500,000	1,000,000	—	4,500,000
Reni (P. Spolianski)	1,000,000	1,000,000	1,000,000	1,000,000	—	4,000,000
Satchilavo (G. I. Serebriakoff)	200,000	200,000	200,000	200,000	—	800,000
	Total ..	..	..	..	.. ..	46,480,000

they have lost nothing by it, as they have directed that quantity of timber to other markets abroad or even in Russia; thirdly, the case manufacturers and the Treasury were the only sufferers. The former, with the imposition of the import duty, had either to part with 3½ copecs per case of their profit to the Russian timber merchant or recoup themselves at the expense of the Indian and Chinese consumers by putting 3½ copecs per case on to the price. In the way of the latter alternative, however, stood the American competition, who, by cutting down prices, could stop the exports of case oil from Batoum, which happened in 1894, when the Batoum exports declined by 4,000,000 cases, and threatened to collapse entirely if the Government had not come to its assistance by lowering the railway rate. The Treasury, in putting into its right hand pocket a revenue of 150,000 to 200,000 roubles per annum on the foreign timber imported into Batoum, had to pay back this amount with interest out of its left hand pocket in the shape of a reduction in the railway rate, and decline in receipts of port dues and other taxes, ing from a reduced export trade at Batoum.

This is, by the bye, an object lesson in regard to protection which might with advantage be taken to heart by many at home.

If space allowed we might go into several other details concerning the case oil trade of Batoum and its importance from a commercial point of view. It will now come as very gratifying intelligence to read the news we publish upon the next column.

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THE PRODUCTION OF BAKU FIRMS IN 1905.

Owing to the recent disturbances at Baku, the statistics of the Baku Petroleum Association have not yet been published, and as a consequence the complete list of the production by firms in 1904 is not to hand. According to preliminary figures, however, the production of some of the leading firms in 1905 compared to 1904 was as under:—

	1905.	1904.
Nobel Bros.	47,448,378	74,892,321
Caspian and Black Sea Society	26,418,483	53,358,170
Mantascheff and Co. (8 months)	26,194,731	49,256,433
Moscow-Caucasian Co.	24,819,717	20,033,054
Baku Naphtha Co.	23,408,313	26,297,386
Caspian Society (8 months)	19,809,978	34,487,947
Baku Russian Petroleum Co., Ltd.	15,264,252	26,027,372
Russian Petroleum and Liquid Fuel Co., Ltd.	13,022,539	28,652,058
Zoubaloff	13,386,000	22,340,000
Nagieff, M.	12,244,252	11,178,760
Russian Naphtha Co.	11,799,985	12,415,972
Pitoeff and Co.	10,491,698	10,479,320
Schibaieff Petroleum Co., Ltd,	9,330,249	14,917,890
Bibi-Eybat Petroleum Co., Ltd.	8,848,300	12,002,500
Mirzoeff Bros. (10 months)	9,987,242	16,272,928
Aramazd Co.	9,108,494	16,733,200
Naftalan Co.	7,307,638	11,450,866
European Petroleum Co., Ltd.	7,000,330	11,932,240
Kalantaroff and Co.	6,582,000	9,208,000
Benkendorf and Co.	4,996,265	6,502,103
Shikhovo Co.	4,323,939	3,150,692
Assadulaeff	6,779,212	8,549,182
Tiflis Co.	5,447,650	5,005,126
Ter Akopoff	4,481,420	8,758,082
Neft Co. (late Tumaeff and Co.) (10 months	4,728,213	9,329,984

THE CRISIS IN THE BATOUM CASE OIL WORKS.

PREPARATIONS TO RE-OPEN.

The Siderides case factory is now again working and Messrs. Mantascheff and Co. are negotiating with their men about the conditions on which the company are prepared to re-start their case oil works. The fears that the closing of the case oil works would cause the loss of the markets to the Russian export trade have been realised, and for this reason when the works do re-open it will be on the basis of a reduced output. Of their two case factories, the Mantascheff Co. propose to re-start only one with a capacity of 20,000 cases per diem. This quantity, however, being far in excess of the present requirements, the firm propose to restrict the output to 5,000 cases on the condition of a minimum working of 12 days in the month, which number of days of employment is thus guaranteed to the men. In this way the firm evidently wish to protect themselves from any demands by the workmen in the case of complications in marketing and the accumulation of excessive stocks at their Batoum and foreign depôts. The Mantascheff Co. further propose to engage their men in organised gangs, in order to avoid strikes and the sudden throwing up of the work by the men and by means of mutual contracts guarantee the regular working. Whether this basis will prove practicable, and whether the men will accept the terms offered is uncertain, although the prolonged period of idleness has reduced them to the verge of starvation. Possibly the men will accept them in the hope of an improvement in the near future. It is certain, however, that the branches of the work connected with the loading of steamers will be done on the gang basis, as the company will not have it in any other way.

It will be remembered, by the way, that the Mantascheff Co. has for some time been supplying the Egyptian market with case oil from their own case factory at Alexandria, which came into being immediately after the closing of their Batoum works. The natives prefer the case oil packed locally to the imported article, both for its better weight and packing, as there is no sea transport and consequent damage to the cases or tins, leakage, etc. Moreover, the manufacture and packing of the tins and cases are done more carefully than at Batoum.

Another difficulty has now cropped up in the demand by the Mahomedans to employ them at the works to the extent of 25 per cent. of the total number of the men employed. Formerly their number was very small, the vast majority of the workmen being Georgians, Armenians, Mingrelians and others. Although it is considered desirable to attract the local Turkish population to the case oil industry, the difficulty lies in their ignorance of the work, which requires a certain amount of experience.

As regards the other case factories, including the large Rothschild works, nothing is as yet known about their intention to re-open.

LONDON AND THAMES HAVEN OIL WHARVES, LIMITED.

ANNUAL MEETING OF SHAREHOLDERS.

The ordinary general meeting of the shareholders in the London and Thames Haven Oil Wharves, Ltd., was held at the Baltic, St. Mary Axe, E.C., on Wednesday afternoon, the managing director—Mr. Alfred C. Adams—presiding in the absence of the chairman—Mr. Owen Philipps, M.P. There were also present Messrs. Allan McCall and F. H. Simmonds (directors of the company), Mr. T. Clarkson J. Burgess, secretary, and a large number of shareholders.

The Secretary read the notice convening the meeting, and also the report of the auditors, the accounts for the year, and the directors' report thereon being taken as read. This shewed that during the second half of the past year the company's business was considerably affected by the general depression in the oil trade, but the directors were pleased to report that the business for the present year shewed signs of improvement.

In moving the adoption of the report, which recommeded a dividend at the rate of five per cent. per annum, the Chairman at the outset apologised for the absence of the chairman of the company—Mr. Philipps—who was unavoidably absent. Proceeding then to speak of the business of the company during the period under review, he said that no doubt some few remarks were necessary as to the falling off in the results during the past year, and the causes which had led to those results. The year 1905, as the shareholders would probably be aware, was, from a general business point of view, unsatisfactory and disappointing in the extreme. A general stagnation of trade prevailed, and the condition of the petroleum trade was no exception to the general rule. Their company had had a good run of prosperity for five or six years, but it was perfectly clear that a trading concern such as theirs, whose business was derived from a trade and dependent to a very large extent upon trade being good, could not hope to have immunity from the troubles which overtook trade, and which in the case of the petroleum trade which they served had been prevalent for two years.

He presumed the shareholders all knew something of the lamentable state of things which was existing in the oil trade; how the Russian oil business, which contributed a great deal of business to this country, was during the latter half of last year reduced by revolution to an absolute standstill. For a long time the destruction of the oil wells themselves was feared, whilst even now that business was resuming to some extent, the exact measure of damage sustained was not at all clear.

But there had also been great depression at home—depression to which reference was made by the directors in their report last year. That depression had lasted now for upwards of two years, and although the strife produced had not attained the same publicity as that in Russia, they must all have heard about it. That home trouble did not attain such proportions in 1904, or rather, its effects had not been so far-reaching as to more than slightly affect that company's business during that year. That state of warfare had been alluded to in terms of strong condemnation by the chairmen of various oil companies who were much more directly involved in the fight than their own company was, but it was generally expected that a better state of things would prevail during the year 1905. Well the year 1905 started with very good prospects, and the business continued satisfactory until the latter half, when the fight amongst the oil companies was still as fiercely raging as ever. Then it was that their company, owing to depleted stocks, was finally involved in the general stagnation and depression from which the oil trade was suffering, and a large falling-off in the volume of stuff passing through their tanks was unavoidable.

The Company's Pier at Thames Haven.

Unfortunately they were debarred giving the shareholders detailed figures shewing the tendency of that falling-off owing to the nature of their company's business. Therefore he could only deal with the matter generally. The reason for that was possibly well known to a great many present that day, but for the benefit of those shareholders who had not been associated with the company for any considerable length of time, he had to explain that their company had no proprietary interests at all in any of the oils or spirits which they handled in the course of their business. Their only interests were as wharfingers and warehousemen, and it was precisely for that reason of their handling and storing goods belonging to companies of antagonistic interests who had confidence that their interests and secrets of their business were safe in their company's hands, that he could not be expected to go into details that afternoon.

As a result of the strong fight in the oil trade, it was only to be expected that efforts should be made to devise some means whereby the business could be conducted in a more economical manner—some altered manner—and the trade had undergone, and was still undergoing, a change due to that tendency. That change undoubtedly had an effect upon their business during the past year, but he wanted to make it clear to the shareholders that they did not expect that change in the oil business was going to affect their company in anything more than a temporary manner. What they had now to do, in view of that change, was to adapt themselves to the altered conditions, and equip themselves accordingly.

Last year their company did not spend anything upon fresh tankage, though there was a very small amount standing in the balance sheet under that heading that was uncompleted the preceding year, and was really work in progress in 1904.

They had been carefully watching the changes which were coming over the oil business, and they had reason to think that when trade calmed down again, the demands made upon them would necessitate more tankage to enable them to cope with the increased figures. Indeed, they were pleased to say that judging from the manner in which the stocks had so far come forward, the outlook was now much more encouraging. The phenomenal developments taking place in the motor business would be seen by the rapid transformation of omnibuses in London to petrol propelled vehicles, and the resumption of the Russian business and many other factors impelled them to anticipate a larger volume of business for the future; and it was just because they did not regard the falling off in 1905 as anything more than a temporary matter that they had considered themselves warranted in recommending the payment of a dividend of five per cent. rather than carry forward an increased amount without any division.

During last year, in response to repeated applications from their shareholders, the board had decided to issue some of the ordinary shares in hand with a view to the adjustment of some capital items, and clear off the balance sheet the item of short loans which had been present in past balance sheets. That item was present in last year's balance sheet, but the shareholders would now note that it had been removed. He did not think there was much else which called for comment upon that side of the balance sheet, but on the other side there was the item of additions during the year, £2,983 17s. 8d. That item covered a variety of expenditure, part being for a new accumulator at Thames Haven, which enabled them to light the works without the expense of running a dynamo outside the ordinary wharf hours, and that saved considerable standing expense under the heading of light. The item also included various machines, pumps, and pipe lines not only for Thames Haven, but for their other wharves.

The shareholders were aware that in January last year they had the misfortune to have a fire at Thames Haven, and one of their tanks was burnt out. The tank which was then destroyed had now been rebuilt, and he was sure those present would be pleased to know that it was now full of oil, and earning money for the company. He then moved the adoption of the report and accounts.

Mr. Simmonds seconded.

Mr. S. H. Leonard asked the chairman if he could give them any further assurance as to why he thought that the causes to which allusion had been made were only of a temporary character. How far was that falling off in the volume of trade to continue. The falling off in the dividend was unfortunate, but that was not the most serious part. He could quite understand that in a business like theirs it was impossible to shew in revenue account specifically how the profits were made or the loss incurred. The chairman had referred to general and specific causes, but it occurred to the speaker that the causes were of a special character. He understood that the disturbances in Russia and trade conflicts had been the chief things which had led up to a falling off in the volume of business which had passed through the company's hands during the past year, but what the shareholders were most anxious about was whether 1906 was likely to be like 1905. Therefore he thought it would be well if their chairman could give them his opinion as to how far there were signs of such an improvement in their business as would enable them to form a reasonable prospect of a similar dividend for the present year's working. He gathered that so far as Russia was concerned, the disturbed state was not yet a thing of the past. Then could their chairman give them any assurance that they would receive 5 per cent. dividend for the present year.

The Chairman replied that the causes which had led up to the falling-off in the volume of trade done by the company for the past year were that the business had been undergoing a change, and it was to that change that part of the falling-off was due. As far as the Russian troubles were concerned, they were not yet out of the wood, but he had received advice from the quarters from which their Russian business came that they might expect a resumption of business very shortly—in a month or so. Last year the company's Russian business during the latter part of the year did not contribute anything at all to their trade, but there had been increases in other directions which tended to minimise any shortcoming in one particular direction. As shewing that the directors had reason to believe the falling-off which had been experienced was only temporary, he would give comparative figures for the past and present year, in a general way, of course. So far, and they were not yet out of March, the total tonnage which they had handled was more than half of the total tonnage which they handled during the whole of 1905. During that year about 25 per cent. was contributed by Russia, and so far they had not had anything from Russia, so when the Russian oil came forward the increase in the volume they were handling should be still greater.

So far as motor spirit was concerned, there was now a tremendous increase in the demand; in fact, the demand was growing so quickly that he thought that within two years the consumption of motor spirit in this country would in all probability double itself. That was a trade for which their company was admirably suited. He supposed that they had handled by far the greater quantity of spirit in the past which came into London, and he knew that for the past 26 years—since he joined the company—they had handled it. That increased demand for spirit, therefore, would tend to minimise their shortcomings in stocks, which might be due to depression of trade. Altogether he thought the prospects for the present year were hopeful.

Mr. Leonard: I am sure the shareholders are gratified with what you have said.

The Chairman here pointed out that they depended upon trading companies for their business, and if those companies went on losing money as they had been for the past couple of years, it must have an effect upon them until that condition was removed. If those companies would only agree to stop fighting and losing money, and so settle down to work, it would be better, but it was gratifying to know that now business gave every indication to continue in a way which was most reassuring.

Mr. B. H. Evans said there might be an increased demand for motor spirit, but did it follow that they would get the advantages of it. The chairman had alluded to changes in the business—he desired to know what those changes were?

The Chairman, in replying to Mr. Evans, said the trade was now being handled in a cheaper manner altogether, and a great deal of work formerly done in connection with it was now not done at all, and consequently certain work which yielded profit to their company was now done away with altogether. They had to remember that although their company's business was to store oil products, what they made their profits upon was the stuff they handled. For instance, if they simply landed and filled their tanks and the oil stayed in storage, they did not make so much as they would do if they got rid of the stuff, and got more in their tanks. The trade during the past year was in a state of stagnation, and therefore was not as profitable as they would have liked.

The resolution adopting the report was then put, and carried unanimously.

A resolution was then submitted to the shareholders, declaring the 5 per cent. dividend, less income tax, this being moved from the chair, seconded by Mr. McCall, and carried.

The re-election of Mr. McCall as director, the re-appointment of the auditors, and a hearty vote of thanks to the chairman for presiding, concluded the business of the meeting.

A SARATOGA GUSHER.

The latest issue of the *Beaumont Journal* states that a gusher has been brought in for the J. M. Guffey Petroleum Co. on the B.B. and C tract at Saratoga, the well flowing at the rate of 12,000 barrels per day. Inquiry at the offices of the Guffey Co. has confirmed the report that the well has come in flowing strongly, but the estimate of the production is not confirmed.

The new well is in the vicinity of one brought in some time ago for the Britton Oil Co. This well started to flow at the rate of 4,000 barrels per day, but afterwards went almost entirely to salt water. If the new Guffey well is kept free of salt water, it will be the most valuable producing well in the Texas oil fields, and will undoubtedly stimulate development at Saratoga, as it is situated in a part of the Saratoga field which has heretofore been but little developed.

THE PANAMA PIPE LINE.

More details reach us regarding the proposed pipe line across the Isthmus of Panama, to be laid by the Union Oil Co., of California. The line will be laid along the Panama railway right of way which is almost parallel with the proposed route of the canal. The Pacific terminus will be near the city of Panama and the Atlantic terminus near the city of Colon or Aspinwall, the distance being practically 50 miles, which will be the length of the line. There will be only one pumping station, which will be located at the initial station—Panama. This will be sufficient to force the oil to Colon, as the maximum elevation is but 210 feet. The line will be eight-inch and will have a capacity of 25,000 barrels daily. The pipe has been recently purchased from the National Tube Co., of Pittsburg, Pa., and shipments have already commenced to Baltimore, Md., from which point it will be transported to Colon, two steamers having been already chartered by the Union Oil Co. for this purpose. These steamers will stay in the service until the material for the tanks, boilers, pumps and other supplies have been shipped to Colon. The company expects to have the line completed and in working order by July 1st. Mr. R. W. Fenn, who has been connected with the Union Oil Co , of California, for many years, will have charge of the work. He is already at the Isthmus busy with the preliminary work, Mr. Thomas L. Galvin, the National Tube Co.'s expert, has been engaged and will have charge of the actual laying of the line.

CUBAN PETROLEUM COMPANY.

The directors of the Cuban Petroleum Co. have just issued a circular, in which they announce the conclusion of an agreement whereby they hope to test their property without cost to themselves. An American firm has undertaken to drill not less than two wells on certain blocks, and the company is to receive 12 per cent. of the gross product of such wells. The lessees, however, have the right to select, within limits, blocks of fifty acres alternately with blocks of similar area which will be retained by the company. The directors point out that not only will the company receive 12 per cent. of the gross product of all wells sunk on the leased claims, but that it will also have blocks of its own on which to drill adjoining ground proved by the lessee firm. The company has been experimenting for the last three years, at a considerable expense, with no very satisfactory results, so that it may be a good thing for some outside philanthropic syndicate to try to earn the shareholders a dividend.

BAKU PRODUCTION IN FEBRUARY.

The total production of crude oil at the Baku oil fields in February amounted to 30,078,000 poods, of which 54,000 poods were contributed by spouters. The production of the leading firms was as under:—

	Poods.
Nobel Bros.	3,800,000
Caspian and Black Sea Society	2,400,000
Baku Naphtha Co.	2,100,000
Caspian Society	1,800,000
Moscow-Caucasian Co.	1,700,000
Aragaz Co.	1,000,000
Zoubaloff	1,000,000
Russian Petroleum and Liq. Fuel Co., Ltd.	1,000,000
Assadulaeff	900,000
Aramazd Co.	800,000
Bibi-Eybat Petroleum Co., Ltd.	800,000
M. Nagieff	800,000
Schibaieff and Co.	800,000
Mantacheff & Co.	800,000
Pitoeff and Co.	700,000
Russian Naphtha Co.	700,000
Mirzoeff Bros.	700,000
Ter Akopoff	500,000
European Petroleum Co., Ltd.	300,000

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$1\frac{1}{16}$-$1\frac{3}{16}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	3/3-3/9
,, ,, ..	£650,000 5½% Pref.	£1	6/9-7/3
Bibi-Eybat Petroleum Co. ..			10/0-11/0
Californian Oilfields	£250,000 Ord.	£1	6¼-6½ C.D.
European Petroleum	£550,000 Pref.	£1	3/0-4/0
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	81-84
Russian Pet. & Liquid Fuel ..	£500,000 6½% Pref.	£1	11/6-12/6
,, ,, ...	£600,000 Ord.	£1	10/6 11/6
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	3⅜-3⅝
,, ,, ...	£575,000 Ord.	£1	8/6-9/6
Shell Transport & Trading ..	£2,000,000	£1	24/0-25/0
,, ,, ,, ..	£1,000,000 Pref.	£10	9⅛-9⅜ X.D.
Spies Petroleum Company ..	£312,500	10s.	7/6-8/0

SCOTCH COMPANIES.

Supplied by Messrs. Maclean and Henderson, Stirling.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. 8½ pd	£199,750	£10	17¾
Do. 6% Cum. Pref. ..	£100,000	£10	12½
Burmah Oil, Ord.	£1,100,000	£1	57s. 3d.
Do. Pref.	£250 000	£1	26s. 0d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	$8\frac{7}{16}$
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	18
Do. New (£8 10s. pd.)	£131,750	£10	16¼
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	88s. 6d.
Do. 6% Cum. Pref.	£100,000	£10	12⅞
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	28s. 0d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	69s 3d.
Do. "B" Deb...	£150,000	£100	150

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on March 26th.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	564	567
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	3,900	3,950
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	163	165
Neft Co.	250	—	—
Nobel Bros.	5,000	8,900	9,000
,, ,, ...	250	445	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

DUTCH COMPANIES.

Company.	Quotations March 28th.	Quotations March 21st.	Florins.
Arnhemsche Petroleum Mij. ..	80	80	1,000
Dordtsche Petroleum Mij. (Pref.) ..	124	124	500
,, ,, ,, (Deb. 4½%)	102¾	102¾	1,000
Elzasser Petroleum Mij.	$2\frac{1}{16}$	2⅛	1,000
Gaboes ,, ,, ...	19¾	19¾	—
Holl. Rumeensche Petroleum Mij...	26	26-27	1,000
Int. Rum. Pet. Mij.	88	89	500
Java Petroleum Mij...	30	30	1,000
Koninklyke Nederl. Pet. Mij. Shares	457-461	484½	250-1,000
,, ,, Share certificates	461-467	486	1,000
Mœara Enim Petroleum Mij. ..	112¼-112¾	114½	100
,, ,, 1-1,000 Oblig. 5	102	102	250-1,000
"Moesi Ilir" Petroleum Mij. ..	35	34⅞	—
Nederl.-Rumeensche Petroleum Mij.	16	12½	
Nieuwe Ned. Petroleum Mij. And...	55¼	55¼	1,000
Oliebronnen in Hannover Mij. ..	170-172	172	—
Panolan Maatschappij Cert. ..	340	340	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	144-147	141	1,000
,, ,, (Common) ..	100-104	94	—
Sumatra-Palembang Petroleum Mij	60¾	60	500

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Spies Petroleum Co., Ltd.—The output for the week ended March 25th was 118,400 poods, or 1,909 tons.

Baku Russian Petroleum Co., Ltd.—The production for the week ended March 11th was 302,000 poods, or 4,870 tons. Details of the past fortnight's production are not yet to hand.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended March 18th was 238,000 poods, or 3,838 tons. No details since.

The European Petroleum Co., Ltd.—The production for the week ended March 25th, 1906, was 88,710 poods, or 1,430 tons.

◆

Property in New Guinea.—Experts acting on behalf of the Royal Dutch Petroleum Co. are now prospecting for petroleum in New Guinea.

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 29th March, 1906, as follows:—

There is no change in the position. The market is still very depressed, and prices are easy. Since the beginning of this month tin has advanced £4 per ton, whilst in the same period tin plates have declined about 9d. per box. The prices of tin plates ruling at present are undoubtedly much below cost, and the crisis is daily becoming more acute for manufacturers. We make prices to-day as under, but it is doubtful if large quantities could be bought for forward delivery at the lower figures:—

IC	18¾ × 14	124 sheets	110 lbs.	12/3 to 12/6 per box.
IC	19¼ × 14	120 ,,	110 ,,	12/3 to 12/6 ,,
IC	20 × 10	225 ,,	156 ,,	17/6 to 17/9 ,,

F.o.b. Wales. Tin lining and iron hooping extra.

◆

A New Oil Company.—A certificate of incorporation has been granted to the Morris Petroleum Co., of Meadville, Pa, to buy, sell, and deal in oil properties.

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The Petroleum Industrial & Technical Review, Ltd.

Saturday, March 31st, 1906.

THE FLASH-POINT FALLACY.

THE question of amending the present Petroleum Acts by the raising of the flash-point of petroleum has, after occupying quite a back seat for some few years, been prominently brought before the country by the introduction into Parliament of a Bill which, if passed, shall be known as the Petroleum Act, 1906.

Mr. J. W. Benn, M.P., is responsible for the introduction to the House of the present Bill, whose chief object is to repeal the second section of the Petroleum Act of 1879, which lays down the 73 degrees standard for the flash-point of oils entering this country.

We well remember the sittings of the Parliamentary Committee upon this very subject some years ago, and the general ignorance which was prevalent in many quarters at that time as to flash-point regulations does not appear to have been removed by the passing of time, and the wider diffusion of knowledge in things chemical.

To-day, as then, the opinion is held that a low flash-point is synonymous with an absolutely unsafe oil. This, in fact, appears to be the basis of the argument, which has, so far, been and will be used in furtherance of the present Bill through the Commons, and that being so, we should make it plain before going further that this popular conclusion is entirely erroneous.

As a matter of fact, the safety or danger that arises is a result of the oil's containing a smaller or larger proportion of light oils which at certain temperatures are given off, and which may produce an explosion. Experiments have proved in a most conclusive manner that the temperature of an oil with a low flash, after burning for several hours in a lamp, is frequently considerably lower than that of an oil having a higher flash, and consequently, according to the generally accepted theory, is far safer. The reasons which bring about the above mentioned results of experiments are obvious. In the case of oil with a low flash, the burning of the vapours takes place farther from the wick and thus the temperature of the burner itself is much cooler, while it consequently follows that the oil itself remains cooler. In the case of oil with a high flash the burning of the vapours occurring close to the burner, causes the oil to be heated, the result being the charring of the wick, and the heating of the oil to a considerable temperature.

As to the benefits to be obtained by the interference of Parliament with the object of regulating the flash-point, it is sufficient to direct attention to the attitude taken in Germany in regard to the subject. In a country, admitted by all to be foremost in chemical attainments, when the question of the flash-point has arisen, Parliament has never taken upon itself to legislate upon so vital and important a matter. Germany, it must be remembered, is in no way interested in the manufacture of illuminating oils in appreciable quantities, and, though the country's standard for the flash-point is 2 degrees lower than in England, Parliament has always hesitated to step in, especially in the face of the declaration of experts. A Committee of the Reichstag, formed of scientific experts, was appointed by the Government, and, after carefully weighing the evidence for and against the suggestion of raising the flash-point, came to the conclusion that by so doing the danger of explosion would not be entirely removed, while the price would be greatly enhanced, and as the oil is the chief source of light of the poorer classes, it was found that such a proceeding would largely add to their expenditure in this direction.

This latter remark applies with great force to the poorer population of this country. If by legislation the standard were increased, it is a foregone conclusion that prices would necessarily have to advance, and at least to the extent of $\frac{1}{2}$d. per gallon, which on the basis of the quantities of illuminating oil imported last year, would represent a loss to the consumer something like £300,000 or £400,000.

With the abundance of heavy crude oils in Texas, however, the possibilities of introducing heavy oils in this country which will have a higher flash-point will be possible, but to lay down by law that the standard shall be increased to 100° F., is creating an unnecessary difficulty which will universally have an adverse effect.

Then, too, as has been proved by the recent statistics in the Scotch newspapers, most of the oils sold in this country have flash-points considerably above the 73 degrees standard, so it seems to us to be somewhat outside the purview of Parliament to interest itself in the matter, especially bearing in mind that the evidence before the committee formed some years ago convinced the members that there was no necessity to increase the flash-point.

The Roumanian and Galician petroleum industry is worthy of being borne in mind when considering the question of flash-point. In these fields we know that the developments are leading up to the export of illuminating oil upon a large scale, and if the suggested new standard were demanded, it would be of the greatest difficulty to obtain it with either the Galician or the Roumanian product.

The prevention of healthy competition is always looked upon as having great disadvantages to the consumer, and it will most assuredly follow that with the 100 degrees flash-point, certain sources of supply will be cut away from this country, and increased prices will be the result.

It is unnecessary to labour the point. If Parliament will only look at the matter fairly and squarely, and be guided in its decision by the opinions of men thoroughly experienced in the nature and properties of petroleum, then we shall soon hear the last of this cry for an increased flash-point. The exercising of due care in the use of oil will do far more good than any amendment of the present Petroleum Acts could ever accomplish, and we would respectfully suggest that our legislators would do well to pause ere they tread where others fear.

LONDON OIL SHARE MARKET.

Friday, March 30th.

Movements in the oil group on the London Stock Exchange have been very limited since we last wrote, and where changes occur some irregularity is disclosed.

On Saturday last Anglo-Russians were only a nominal market, no price being given for sellers, the quotation being 0 to $\frac{1}{8}$, but Baku Ordinary were good at 3s. 3d. to 3s. 9d., although Preference remained unaltered at 6s. 9d. to 7s. 3d. Bibi-Eybats were $\frac{7}{16}$-$\frac{9}{16}$, Californian Oilfields $6\frac{3}{8}$-$6\frac{5}{8}$, Californian Refineries $\frac{3}{8}$-$\frac{5}{8}$, European Preference $\frac{1}{8}$-$\frac{1}{4}$, Debentures 81 to 86, Russian Ordinary 11s. 6d. to 12s. 6d., Preference 11s. to 12s, Debentures 87 to 90., Schibaieff Ordinary 9s. to 10s., Preference $3\frac{3}{8}$-$3\frac{5}{8}$, Shell Transport Ordinary 24s. 6d. to 25s. 6d., Preference $9\frac{1}{4}$-$9\frac{3}{4}$, and Spies $\frac{11}{32}$-$\frac{13}{32}$.

Monday's quotations gave a closer price for Californian Oilfields at $6\frac{3}{8}$-$6\frac{1}{2}$, but Shell Transport Ordinary were weak at 23s. 6d. to 24s. 6d., while Wednesday's only change was an alteration in Shell Transport Preference, which were ex-dividend at 9-$9\frac{1}{2}$.

On Thursday, Californian Oilfields were in request, closing price being strong at $6\frac{1}{2}$-$6\frac{3}{4}$, which shewed a rise of $\frac{1}{8}$ per cent. On the other hand, Schibaieff Ordinary was lower at 8s. 6d. to 9s. 6d., a fall of 6d. on balance.

The mid-April settlement commenced on Monday, and its advent was generally welcomed, for the 19-day account it terminated had proved a wearisome affair. Contango rates were rather stiffer, that charged for Oil Shares being about 6 to 8 per cent. Bakus had improved 3d. at 3s. 3d. since last account, Californian Oilfields $\frac{1}{16}$ at $6\frac{1}{2}$, and Spies 6d. at 3s. 8d., while Anglo-Russians fell $\frac{1}{16}$ at $\frac{1}{16}$, Russian Ordinary $\frac{1}{16}$ and Preference 9d. at $\frac{9}{16}$ and 12s 3d. respectively; Schibaieff Ordinary 1s. and Preference $\frac{1}{8}$ at 9s. and $3\frac{1}{2}$, and Shell Transport Ordinary $\frac{1}{16}$ at $1\frac{3}{16}$. Baku Preference at 7s. was without alteration.

MISCELLANEA.

THE BILL TO AMEND THE PETROLEUM ACTS.

The object of the Bill, presented to the House of Commons, by Mr. J. W. Benn, during the present week, is explained in the memorandum to give legislative effect to the intentions of Parliament as expressed in the Petroleum Act, 1871. That Act, continues the memorandum, placed legislative restrictions on the sale, keeping and carriage of petroleum with a flash-point under 100° F. The flash-point of petroleum is the lowest temperature at which it begins to give off inflammable vapours. The Act of 1871 prescribed a test, known as the open test, by which the flash-point was to be determined. That test was, subsequent to the date of the 1871 Act, found to be fallacious. Unless it was applied with extreme care and scientific accuracy the open test was found to be incorrect to the extent of approximately 27°. In other words, if the flash point of any particular oil was in reality 73° F., the open test, as usually applied, shewed its flash-point to be 100°. To correct the errors incident to the use of the open test, the close test was devised by Sir Frederick Abel. The close test was made compulsory, and the open test was abolished by the Act of 1879. But by that Act the restrictive legislation prescribed by the Act of 1871 with regard to petroleum with a flash-point under 100° F. was applied to petroleum with a flash-point under 73° F. All petroleum with a flash-point above 73° F. was thus, contrary to the 1871 Act, freed from legislative restrictions. The purpose of this Bill is to substitute the accurate or close test for the inaccurate or open test in the Act of 1871, and to restore the 100° flash point prescribed by that Act.

◆

IMPROVED MANUFACTURE OF RICINUS OIL PRODUCT.

A patent has been recently granted to the Stern-Sonneborn Aktiengesellschaft, of Hamburg, K1, Grasbrook, for an invention which relates to the manufacture from ricinus oil of a product that will mix with mineral oils. Such a product has already been manufactured by distilling ricinus oil until it has lost a certain amount of its weight, and by interrupting the distillation before a gum-like product is formed.

This invention avoids the waste caused by distillation and the well-known drawbacks of dry distillation of oils generally, and consists in heating, under pressure, the oil to be treated. To that end the oil is heated, under pressure, in a hermetically closed boiler or autoclave until it mixes perfectly and in any proportion with mineral oil. It has been found that the most suitable temperature is 260°—300° C. with a pressure of four to six atmospheres, and the time of heating about ten hours. The autoclave is then left to cool down completely before it is opened. The product obtained will be found to then mix directly with mineral oils. According to the experience of the applicants, this process in a closed vessel completely precludes the danger of the formation of any gum-like product from the ricinus oil.

LATEST NEWS FROM THE BORYSLAW-TUSTANOWICE FIELD.

The output of crude oil at Boryslaw is declining steadily, whilst, on the other hand, at Tustanowice it is increasing quite as steadily. New producing wells are completed at Tustanowice almost daily, whilst some of the old wells increase their yield after being deepened. The total production of Tustanowice in February was 18,000 tons, whilst Boryslaw proper yielded no more than 14,000 tons.

According to information from a reliable source, the rate of production of the more important wells at Tustanowice at the time of writing was as follows:—Litwa, 120 tons per day; Triumph, 60 tons; Urycz Co., 70 to 80 tons; Nahlik-Malczewski, 35 tons; Clay and Co., 15 tons; the Sesam well, of Messrs. Wolski and Co., 60 tons; George, of Mr. Biesidecki, 50 tons; Ewka, 10 tons; Bitum, 20 tons; Aba, of Mr. Spitzmann, 20 tons; Genia, of Laudes and Co.; Banzay, of 15 tons; Count Reginer, 5 tons; Fanto and Co., 10 tons; Galizische Karpathen Co., 30 tons; Argathe (Feuerstein and Co.), 40 tons; Ernistine, 15 tons daily.

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IN THE CRIMEA.

MESSRS. NOBEL BROS. STRIKE A SPOUTER.

A telegram received from Russia announces the striking of a spouter in the Crimea in a trial boring carried on by Messrs. Nobel Bros. at Tchongelek, about 20 to 25 miles from Kertch. The well is 1,400 feet deep, and has a small diameter, several thousand poods of oil being thrown out in the first eruption. Although geological investigations have long proved the existence of a prolific petroleum deposit in this locality, and there have even been attempts at exploitation made years ago, yet owing to lack of capital and experience, no practical success was achieved. Now, however, that the field has been taken up by Nobel Bros., with their vast resources, it is certain to receive the full development, which its natural resources may justify. The geographical position of this field, which is within a few miles of the sea, is exceptionally favourable for an export trade.

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THE BAKU RUSSIAN PETROLEUM COMPANY.

CONTINUED AGITATION.

Following upon the representative meetings of Lancashire shareholders at Liverpool and Manchester last week, when local committees were formed to select a suitable gentleman to serve upon the proposed new directorate, a large gathering of Yorkshire shareholders in the above company was held on Tuesday at the Hotel Metropole, Leeds, when a resolution was carried expressing approval with the present agitation. At the same meeting a strong local committee was formed to suggest a probable director to represent the Yorkshire shareholders.

NOTES FROM ALL QUARTERS.

AMERICAN.

Fire at Sarnia.—The latest edition of the Canadian *Oil Journal* to hand records the outbreak of a serious fire at Sarnia on March 12th, at the Imperial Oil Co.'s works. The damage is estimated at $75,000.

Pennsylvanian Natural Gas.—Though the oldest of the producing states Pennsylvania still leads in the value of its output of natural gas. For the past year the valuation is stated to have been over $21,000,000.

Mid-Continent Oil Producers' Association.—The Mid-Continent Oil Producers' Association has now been fairly launched. Committees have been appointed, and it has been decided to conduct an energetic campaign in order that the membership might be augmented.

Wildcatting in Cherokee.—It is reported that a vast amount of wildcatting is now being done in Cherokee, a district in the Mid-Continent fields which is now coming rapidly to the front. This is rendered almost a necessity in order to prevent confiscation of a number of the leases.

Errata.—In our last week's issue in a paragraph under American Notes, we regret that we inadvertently spoke of the growth of the American lubricating oil trade. This, of course, should have been the Texas lubricating oil trade. The mistake was undoubtedly apparent to our readers.

Crude Oil Experiments.—The use of crude oil in the puddling furnaces is contemplated by the American Rolling Mill Corporation, of Muncie, and if the tests to be conducted prove successful, a pipe line will be laid from the company's producing territory near Muncie, and the coal furnaces will be permanently discarded.

Oakland News.—From Dempseytown, Pa,, we learn that a deal of interest is now being manifest in a number of tests that are being made for oil and gas a few miles from Cooperstown. The farmers in the locality imagine that their land is situated directly on the oil belt, and much land is now being leased for both oil and gas purposes.

In Jefferson County.—An interesting communication reaches us from America to the effect that the oil developments in Jefferson county are being carried out with much energy at present, and no less than 21 wells have thus far been drilled, all of which are producers. Upon another page in this week's Review we dwell upon the matter at length.

Sandy Lake Oil Field,—A communication from Franklin states that the growing interest in the Sandy Lake oil field has been greatly augmented by the recent strike of a well by the Parker Oil Co. Much development work is now under way, and several wells are being rushed to completion in the hope that oil in paying quantities will be encountered.

A New Californian Association.—The Californian Oil Producers' Association is the title of a new organisation of operators formed "to gather statistics relative to the production and consumption of oil in California, to perfect a closer relation between the producers of the State, and for such other work as may be for the best interests of the association."

America's February Exports.—The total exports of petroleum from America during February amounted to 80,503,657 gallons, as compared with 65,922,993 for the corresponding month last year. The great increase as was to be expected is to be found in the exports of lubricating oil, in which of late Texas is playing a prominent part. Full details will be given next week.

Canadian Oil Deals.—It is reported that Mr. A. G. Philips, of Oil Springs, has recently purchased an oil property at the east end of Petrolea, which consists of 50 acres of land, upon which have been drilled some 45 producing wells. Another land deal is that of Mr. J. Tuttie, of Marthaville, who has purchased the R. I. Bradley estate, consisting of about 35 acres and 40 producing wells.

According to the Official Report of the Claustal Mining Bureau, the output of crude oil in the Hanover oil fields in 1905 amounted to 57,741 tons against 67,604 tons in 1904.

ROUMANIAN.

A New Moreni Well.—Well No. 14, of the Campina-Moreni Co., at Moreni, has struck oil and has been flowing for some days.

New Oil Stratum.—Mr. L. Catargi has discovered tn one of the two boreholes which he is drilling at Bustenari a new oil stratum, the yield of which will be determined after the borehole has been cleared.

Railway Fuel Contracts.—The Roumanian State Railways administrators have concluded contracts for the supply of part of the fuel oil required by them, and the contracts for the remaining quantity required are to be concluded shortly.

A Bustenari Spouter.—Messrs. S. Gogalniceanu and M. Zeutler have a flowing well at Bustenari. Only after the sand has been cleared out of the borehole will it be possible to determine the quantity of the yield.

A Loss.—The Societe des Petroles Roumains (formerly the Credit Belgo-Roumain), proprietors of the refinery now held on lease by the Aquila Franco-Romana, have closed their accounts for 1905 with a loss of 68·525 francs.

An Extension of the Campina Field.—A new borehole of the Steaua Romana has struck oil on the southern slope of the Campina valley. This well, which is very prolific, marks an extension in the workable area of the field.

The Credit Petrolifer has sold to the Roumanian sugar refineries 12,000 tons of residuals for fuel purposes; the Aurora Co. has sold to the Romana-American Co. a large quantity of illuminating oil at a good price, whilst the Trajan Co. has sold also to the Romano-American Co. 1,500 tons of benzine.

Outcrops of Petroleum have been discovered on the property of a peasant at Florestiti, in the neighbourhood of the estate of Prince G. Cantacuzene, the present Roumanian Prime Minister, who has acquired concessions on all the neighbouring peasant lands. Florestiti comes within the Baicoi-Moreni zone.

The Aquila Franco-Romana is preparing to do a large trade in the export of illuminating oil to the East, and are now buying up quantities of tins for that purpose. For the present the filling of the tins is taking place at the company's refinery at Plopeni, but later a special case factory will be established at Constantza.

To Drill Deeper.—The *Moniteur dù Petrole Roumain* gathers the impression that the leading firms operating at Bustenari-Mislisorea are resolved to push some of their wells there to greater depths, as it is thought that in view of the great number of borings and hand wells in the Bustenari field and the way they are crowded together, will soon render exploitation unprofitable, and it is therefore necessary to try and see whether other petroliferous strata are not deeper down besides those now in exploitation.

RUSSIAN.

From the 2nd-15th March the free storage of bulk oil in tank waggons at stations on the narrow gauge section—Tchernigoff to Krasnoye on the Moscow-Kieff-Voronezh Railway—has been reduced from six to three hours. From the same date charge for storage above that time has been doubled.

The Financial Position at Baku.—In reply to an enquiry by the exchange committee as to whether there was any improvement in the financial position of Baku business firms, the banks operating at Baku have replied that the difficulties continue, and that bills in most cases have to be renewed on the paying-off of 10-25 per cent., at 9-10 per cent. interest.

Batoum Shipments.—The shipments of petroleum products from Batoum during the week ending March 4th (o.s.), were as under (in thousand poods):—

	Illuminating oil.		Other products.	
	1905.	1906.	1905.	1906.
To Europe ..	336	286	13	137
To the East ..	549	5	—	—
To Russian Ports	99	106	—	2
From Jan. 1st to Mar. 4th:—				
To Europe ..	3,251	1,241	1,078	722
To the East ..	3,058	636	80	—
To Russian Ports	735	873	—	29

OUR . . . . . AMERICAN LETTER . .

From Our . . Own . . . . Correspondent.

Pittsburg, *March 10th*, 1906.

Since my last letter to the Review, a few weeks ago, lower south-west operators have failed to introduce anything out of the ordinary. Fewer wells have been completed than have been the rule, and none have been located in advance of the old developments a sufficient distance to shew anything more than a slight extension to the previously defined producing limits. As for strictly new pools, nothing has been discovered in months that would indicate that new producing territory might be had by a continuance of development work.

In the deep sand district, the cessation of experimental work is more pronounced than in any other quarter. The late completions have been so universally small that there is no disposition to keep up active work in the old fields or make an effort to find new pools. The four most important counties that can be relied on for deep sand production are Marion, Wetzel, Harrison and Doddridge, and there is less work under way and starting in these counties than at any time in many years. In all of the four counties, the various gas companies have been fairly active for more than a year, and it was hoped that in the search for gas some new oil producing territory might be discovered. The result shews that no important discoveries have been made by them in any quarter. Now and again they have drilled in small oil producers, but when an effort was made to extend the producing limits, dry holes have followed.

Two months ago it was thought the Philadelphia Co. had discovered a new fourth sand pool, on Long Drain run, in Church district, Wetzel county. The first well to shew oil in large quantities was that company's test on the Teagarden farm. When first drilled into the fourth sand pay it started at gusher speed, but the decline was rapid, and the shot that was given it later was of but temporary help. The second test was light as compared with the first, and neither well is now more than an ordinary producer. The new work that was expected to start after the completion of the first well has not materialised, and many of the locations made will not be drilled unless there is something more encouraging found in the vicinity.

In the shallow sand district, operators have met with more encouragement. On Point Pleasant creek, Ellsworth district, Tyler county, the Southern Oil Co. recently completed a test on the Workman farm that promises a liberal extension. The well is holding up at about 80 barrels a day, and has been completed for more than a fortnight. There is considerable new work contemplated for that locality, and it is possible that it may prove an active development in the early spring. The eastern edge of Tyler county has received a good deal of attention the past few years, and occasionally some very good producers have been found, but the pools have in almost every instance proved congested, and by the time development work had become active, dry holes put in an appearance and resulted in disappointment.

Just now the Salt sand territory in Ritchie county is receiving considerable attention, and the new work is proving satisfactory. There is in that county a stretch of Salt sand territory several miles in length that looks capable of furnishing fair wells. All told, there are not fewer than a dozen test wells drilling and starting in the district.

Calhoun county has something new to offer south of the Rowells run district. The way the initial well on the Bee farm is holding up looks favourable for that locality. There is a little new work starting, and with the return of spring there will be greater activity.

In the extreme lower south-west in Putnam county, the oil and gas companies have been trying for more than a year to find a new pool. In Curry district some very good gassers have been found, but up to the present time oil has not been found in paying quantities. The development work in this county was inspired by the big lime development near Milton, in Cabell county. All efforts to extend the producing limits of the last named pool have been abandoned. The old wells have fallen very low in production, and the entire pool has been surrounded by dry holes, leaving no room for an outlet.

In South-eastern Ohio the Berea grit development in the vicinity of Woodsfield, Monroe county, is the most active. There are more wells drilling in that district, and the average production of the completions is higher than in any other. An extension to the south is assured, and in that direction development work is now most active.

In the Shallow sand district of Washington county, there is a falling off in new work. The old districts have been very fully developed, and there is no longer room for additional wells except in a few localities. There is still an effort made to find new pools, and the chances are favourable. A dry hole in the shallow sand territory does not condemn a large area.

Harrison and Jefferson counties have not been deserted. In both, there is experimental work under way and starting. Both have been furnishing some new producing territory within the last year, and it is probable that more new pools will be discovered before the close of the current year.

Information from Muncie, Indiana, states that the most important point in the entire field just at the present time is centred in the south-west corner of Hamilton county in Washington township, and south-west of Noblesville. The excitement is over a well drilled in by the Valley Oil Co., to which reference has already been made in the Review. While the well is not a gusher, it shews conclusively that oil exists there in paying quantities, and by the way the oil men are at work taking leases, it is evident that it is destined to be one of the active spots during the coming season. All told, there have been four wells drilled in the new field, and while none of them were dry, the first three drilled in were not sufficiently large to attract much attention, as they were drilled during the deep sand boom in the Delaware county field. The new well is estimated as good for a century producer for the first twenty-four hours, and that is sufficiently large to encourage further operations. The same company is drilling a well on the T. A. Inman farm in the same section, and the Dismal Oil Co. is drilling No. 1 on the Milton Tomlinson farm in the same section. Should these two wells come in as good as the new one just completed there will be another Casey rush to the Hoosier State. The supposition among oil men is that the field will extend from the Ohio line west into Illinois, and that there is plenty of undrilled acreage yet to be developed in the centre and western sections of Indiana. At Terre Haute, the old well drilled about 20 years ago is steadily doing about 16 barrels a day, and certainly has a strong feeder from somewhere.

The town of Hortonville, where the new Horton farm well is located, is wild with excitement over the strike. Oil men from the various fields are on the ground hunting for territory that is not already held under lease.

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FEBRUARY STATISTICS OF PENNSYLVANIA PIPE LINE RUNS AND SHIPMENTS.

A record was established in the Pennsylvania pipe line runs during February, for they were the lowest for over sixteen years. The shipments also shewed a decrease, but considerably exceeded the runs so that there was a draw upon the stocks. February shewed a decline of 141,167 barrels in the stocks of Pennsylvania, and 532,770 barrels in the net stocks of Lima oil, making a total decrease of 673,937 barrels. In January the net stocks of Pennsylvania oil declined 131,613, and the Lima oil stocks 188,111 barrels, making the total decline for the month 319,724 barrels.

The average daily pipe line runs of oil of the Pennsylvania grade for February were 69,949 barrels, or 1,791 barrels less than the average for January.

In the Lima oil regions of North-western Ohio and Indiana the runs for February averaged 41,067 barrels a day. This was a decline of 2,005 barrels from the average for January. There has been a heavy decline in field work in the Trenton Rock oil districts, and it is impossible to expect any increase in production from the territory now in sight. The runs for February, 1905, averaged 51,575 barrels a day.

The February shipments of Pennsylvania oil averaged 74,471 barrels, or 2,118 barrels less than the average for January. For the corresponding period a year ago, the shipments averaged 78,159 barrels.

The shipments of Lima oil in February averaged 67,480 barrels a day, which represented a gain of 3,436 barrels over the average for January. The Lima shipments for February, 1905, were 69,265 barrels a day.

In the following table the average daily runs and shipments of the Pennsylvania and Trenton Rock fields are given for the two months:—

Average Daily Runs.

1906.	Pennsylvania.	Buckeye.	Total.
January.. ..	71,740	43,072	114,812
February ..	69,949	41,067	111,016

Average Daily Shipments.

1906.	Pennsylvania.	Buckeye.	Total.
January.. ..	76,589	64,044	140,633
February ..	74,471	67,480	141,251

ANOTHER AMERICAN OIL FIELD.

OPERATIONS IN JEFFERSON COUNTY.

The new Jefferson and Elk county oil field, deserves more prominence in the oil press than it has yet received, as the latest of America's fields. Since the development of the leases, commenced about six months ago, 21 wells have been sunk, three of them producing gas, and 18 of them producing oil. Within the next year it is expected that fully half a hundred more wells will be put down. The production of the wells in the territory to-day is upwards of 200 barrels, and the gassers are large producers. There are now seven companies operating in the field. They are: - Bell Bros. and Smith; the South Penn Oil Co.; the Winlack Oil Co.; the Gruver and Smith Co.; the Long Bros. Co., of Warren; the Jefferson Gas Co., and the Jefferson Oil Co., which is made up of Brookville capitalists. The field, which is in the Speechley sand, is about 12 miles in length, extending from Siegel, Jefferson county, to a point near Hallton, Elk county. The width of the oil belt is about half a mile. The production is one of the most valuable to be found in all of the oil territories. This is evident, says the *Du Bois Courier*, by the action of the Standard Oil Co., which has built a pipe line into the field, and is transporting the product of the wells to its pump station at Crown, advancing the price of crude oil from $1·58 to $1·68 per barrel. The advance was voluntary on the part of the Standard Co., who market the oil, and solely on account of the high quality of the production, which is equal to that of the Tiona field, which produces one of the highest grades of crude oil that is thrown on the market.

As stated above, the production of the field is upwards of 200 barrels per day. The South Penn Oil Co. is the largest producer. Its nine wells are producing 125 barrels per day; the Winlack Oil Co.'s five wells are producing 50 barrels; the two wells of Gruver and Smith are producing 15 barrels; the three wells of the Jefferson Gas Co., 15 barrels; the one well of the Long Bros., Co., of Warren, is averaging 10 barrels, and the one well of Bell Bros. and Smith is producing 2 barrels per day. Exclusive of this are the two gas wells of the Jefferson Gas Co.

All of the wells that have been drilled have been put down to a depth of 1,900 feet, the depth that the full value of the Speechley sand is reached.

The largest producing well that has yet been brought in is located in the Hallton district, 10 miles north-east of Seigel. It is on a lease, owned by M. Smith and Bell Bros., and it is expected that that territory will be among the most productive of the field.

All of the companies that are named above are actively developing their holdings. At the present time A. C. Smith, who is a member of the firms of Gruver and Smith and Bell Bros. and Smith, has five strings of tools, which means five crews of workmen drilling day and night. Mr. Smith expects to increase his working force materially within a short time.

The American Oil Market.

New York, Week ended March 17th.

The large decrease in the production in the northern fields during the month of February, as disclosed by the statements at the pipe lines, has again prompted the operators to contend that the price of the high grade oils should advance. The stocks in possession of the pipe lines are now reduced to 3,230,000 barrels, and the total stocks of all grades to 15,110,000 barrels, the decrease during February having amounted to 674,000 barrels. This is the smallest supply held above ground yet recorded, and the statistical situation is therefore regarded as warranting the expectation of higher prices. It is regarded doubtful if the production can be kept up to the present amount, owing to the rapid decrease in the productivity of the wells, and further large shrinkages in stocks are looked for. When the roads are in better condition new work will be started in some districts that are not now accessible. There will be considerable wildcatting in the lower south-west and south-eastern Ohio fields, and that there will be some new pools discovered, and the producing area of some of the old fields extended may be regarded as certain. The reports from the fields during the past week show a smaller number of completions, says the *Oil, Paint and Drug Reporter*, but in the old districts several exceptionally good producers have been brought in. These should add considerably to the output, but this class of wells decline rapidly in production, and it is doubtful if these have been sufficient to offset the decrease in total production. The predominance of small pumpers continues, and the percentage of failures to find oil has shewn no improvement, but an encouraging feature of the past week has been the discovery of important gas wells where oil had been sought. Considerable new work has been started in the vicinity of the new flowing wells brought in, and it is believed these will prove a strong incentive to the active prosecution of field operations as soon as the weather becomes settled, and the roads are in fair condition for the transportation of supplies. From Kansas and the territories it is reported that new work is being prosecuted with less vigour, but stocks continue to increase at a rapid rate. In Texas considerable new work is reported, but the production continues to decrease. In the Louisiana fields, however, production is still increasing. There has been no further change in prices for Texas oils.

Refined and Products.—The demand for refined for export during the past week has been good, and the prospects for continuance of liberal requirements for export are regarded as favourable as conditions in the European markets shew no change. The total engagements during the past week amount to about 225,000 barrels, all for shipment in bulk.

The price for barreled oil has remained steady at 7·60c. for New York loading, and at 7·55c. for Philadelphia loading. The principal foreign markets are steady. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. 3d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export have been in active request, and sales of about 375,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in light request, and sales of about 20,000 barrels are reported. Pennsylvania crude is quoted at 7·60c. in barrels.

Crude naphtha continues steady. For export, sales of about 5,000 barrels have been reported.

CLOSING QUOTATIONS.

Crude.		Week ended Mar. 10. 1906.	Mar. 17. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4·70	4·70
Residuum, bbls for export	.. ..	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were:—

	Week ended Mar. 17. 1905.	Mar. 17. 1906.
Tiona	1·54	1·68
Pennsylvania	1·39	1·58
North Lima	0·93	0·94
South Lima	0·88	0·89
Indiana	0·88	0·89
Canadian Oil:		
Petrolia	1·33	1·34

Refined—For Export.

		Week ended Mar. 10.	Mar. 17.
Cargo Lots for export	per gal.	7·60	7·60
In bulk		4·70	4·70
Philadelphia loading		7·55	7·55

Refined in Cases—110 Fire Test.

	Week ending Mar. 10.	Mar. 17.
5,000 to 10,000	10·35	10·35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended Mar. 10.	Mar. 17.
120 fire test, S.W.	per gal.	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ending Mar. 10.	Mar. 17.
Naphtha, crude, car lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	17	17

Pennsylvania Oil Runs from Mar. 9th to Mar. 14th were:—Mar. 9th, 76,868; Mar. 10th and 11th, 116,046; Mar. 12th, 33,515; Mar. 13th, 66,842; Mar. 14th, 62,441. For the month of February, 1,958,573.

The Deliveries of Pennsylvania Oil for the same dates were:—64,261; 152,693; 63,411; 75,355; 71,435. For the month of February, 2,085,194.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended March 16th and from Jan. 1, were as follows:—

	Week.	Year.	1905.
Refined, barrels and bulk	224,200	2,376,300	1,916,400
Refined, cases	386,000	2,892,000	6,036,000
Crude, barrels and bulk	19,400	384,500	244,400
Crude, cases	—	65,000	50,000
Naphtha, barrels	6,900	89,800	128,100
Residuum, barrels	—	115,000	217,300.
Lubricating, barrels	12,600	85,500	36,500
Total, barrels cde. eq.	501,152	5,197,340	5,546,452

Clearances for the Week.

During the week ended Mar. 16th, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1905.
Refined	9,708,110	99,401,750	89,523,240
Crude	—	210,100	423,107
Naphtha	42,950	3,354,050	2,592,960
Residuum	—	—	2,794,915

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Mar. 16th	12,944,147
Total from New York, from Jan. 1, 1906	132,752,447
Same period last year	119,787,428
Increase	12,965,019
From United States, week ended Mar. 16th	22,859,904
Total from United States, since Jan. 1, 1906	238,243,358
Same period last year	211,221,630
Increase	27,021,728

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The "Review" Shipping List.

MARCH 22, 1906.

Specially Prepared for this Journal.

NOTE.—Except when otherwise stated the Vessels are Steamers.

(*The following abbreviations are used in this table:*—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Philadelphia	Sables d'Olonne	P. Reedy Island, Feb. 28
ALCHYMIST	Terneuse	London	Arr. Mar. 17
AMERICAN	Antwerp	New York	Arr. Mar. 16
APPALACHEE	SanFrancisco	Shanghai	Arr. abt. Mar. 19
APSCHERON	Batoum	Hamburg	L. Mar. 13
ARAL	Tyne	Philadelphia	Arr. Mar. 25
ARAS	Newport	Batoum	Atr. Mar. 22
ARGYLL	Honololu	SanFrancisco	Arr. Mar. 2
ASTRAKHAN	Hamburg	Tyne	L. Mar. 27
AUGUST KORFF	Bremen and Tyne	New York	Arr. Mar. 25
AUREOLE	Tyne	Philadelphia	Arr. Mar. 25
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Tyne	—	P. Gibraltar, Mar. 17
BALAKANI	Manchester	Philadelphia	Arr. Mar. 26
BATOUM	Tyne	Port Arthur (Texas)	Arr. Mar. 16
BAYONNE	Venice	Philadelphia	At Gibraltar, Mar. 26
BEACON LIGHT	Philadelphia	Bilbao	L. Mar. 25
BEME	Bombay	Rangoon	L. Mar. 6
BLOOMFIELD	Bremerhaven	Tyne	Arr. Mar. 13
BORJOM	Alexandria	Batoum	Arr. Mar. 11
BRILLIANT	Hamburg	Philadelphia	L. Tyne, Mar. 14
BROADMAYNE	Kustendje	Rouen	L. Constanti'ple, Mar. 20
BULLMOUTH	BalekPappan	Shanghai	Arr. Mar. 19 and L. Mar. 25
BULYSSES	Tyne	Philadelphia	In the Downs, Mar. 24
BURGERMEISTER PETERSEN	Stettin	New York	Arr. Mar. 28
CADAGUA	—	—	In port, Bilbao, Mar. 22
CALCUTTA (Br. bq.)	SanFrancisco	Shanghai	L. Mar. 14
CARDIUM	Blexen	—	L. Mar. 27
CAUCASIAN	London	Philadelphia	Arr. New York, Mar. 27
CHARLOIS	Rotterdam	Philadelphia	Arr. Mar. 23
CHESAPEAKE	Tyne	Philadelphia	L. Mar. 13
CHESTER	Philadelphia	Antwerp	P. Scilly, Mar. 28
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Hong Kong	—	L. Mar. 22
COWRIE	Singapore	—	L. Mar. 27
CYMBELINE	Batoum	Manchester	P. Galatz, Mar. 19
CZAR NICOLAI II.	Novorossisk	Rouen	P. Havre, Mar. 27
GHESTAN	Antwerp	Batoum	P. Dungeness, Mar. 26
DAKOTAH	San Francisco	Shanghai or Canton	L. Mar. 10
DELAWARE	Philadelphia	Liverpool	Arr. Mar. 24
DEUTSCHLAND	New York	Dublin	L. Mar. 21
DIAMANT	New York	Stettin	Arr. Mar. 14
EI AX	Sydney	Newcastle (N.S.W)	Arr. Mar. 24
ELISE MARIE	New York	Rotterdam	L. Mar. 25
ENERGIE	New York	Hamburg	Arr. Mar. 22
ERIVAN	Antwerp	Philadelphia	Off I. of W., Mar. 17
EUPLECTELA	Philadelphia	Dover	P. Prawle Pt., Mar. 29
EXCELSIOR	Hamburg	New York	P. Dungeness, Mar. 20
EZIO	—	—	Coasting Peru
FRANCE MARIE	Philadelphia	Marseilles	P. Del. Break., Mar. 4
GEESTEMUNDE	Philadelphia	Copenhagen	P. Del. Break, Mar. 14
GENESSE	Philadelphia	Manchester	At Liverpool, Mar. 28
GEORGIAN PRINCE	Tyne	Havana	Arr. Feb. 21
GOLDMOUTH	Cardiff	Singapore	At Port Said, Mar. 27
GRAFSTROGANOF	—	—	Sold U.K. and named Ashtabula
			In Tyne, Jan 10
GUT HEIL	Philadelphia	Havana	P. Del. Break., Mar. 8
HAINAUT (Dch. shp.)	Antwerp	Alexandria	P. Gibraltar, Mar. 24
HARRY WADSWORTH	Port Arthur (Texas)	Liverpool	Arr. Mar. 10
HELIOS	Alexandria	Syria	L. Mar. 19
HOTHAM NEWTON	Bremerhaven	Middlesbro'	Arr. Mar. 21
HOUSATONIC	Newcastle (N.S.W.)	SanFrancisco	Arr. Mar. 12
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Piræus	Taganrog	L. Mar. 21
J.B. AUG. KESSLER	Port Arthur (Texas) and Thameshaven	Rotterdam	Arr. Mar. 7
JAMES BRAND	Thameshaven	Tyne	Arr. Mar. 17
KURA	London	Port Talbot	Off I. of W., Mar. 27
LA CAMPINE	Antwerp	New York	P. Nantucket, Mar. 27
LA FLANDRE	Philadelphia	Ghent	P. Del. Break., Mar. 10
LA HESBAYE	Batoum	Antwerp	Cl. Constant'ple, Mar. 20
LA MADALEINE	Antwerp	Savona	Arr. Mar. 14 and L. Mar 18
LA VIGUESA	Marcus Hook	Vigo	Arr. Nov. 6
LACKAWANNA	Philadelphia	Calcutta	P. Cape Spartel, Mar. 24
LE COQ	Philadelphia	Santander	Arr. Mar. 19
LOUTSCH	Barcelona	Novorossisk	L. Const'ple, Sept. 5
LUCERNA	Tyne	Batoum	P. Sagres, Mar. 19
LUCIFER	Liverpool	Philadelphia	P. Old Head of Kinsale, Mar. 28
LUCIGEN	Batoum	Novorossisk	L. Mar. 22
LUCILINE	Dunkirk	Philadelphia	Arr. Mar. 20
LUMEN	Tyne	Philadelphia	L. Mar. 18
LUX	Rouen	Philadelphia	L. Mar. 27
MAKKAVEI	Sulina	Novorossisk	L. Mar. 20
MANHATTAN	New York	Venice	L. Mar. 15
MANNHEIM	New York	Hamburg	L. Mar. 22
MARGARETHA	London and Newport	Manzanilla	Off Barry Island, Feb. 1
MEXICAN PRINCE	Tyne	Cuba	P. Dungeness, Mar. 28
MIRA	Newport	New York	Arr. Mar. 23
MUREX	Tientsin	—	L. Mar. 12
NARRAGANSETT	London	New York	P. Southend Mar. 28
NERITE	Palembang	—	L. Mar. 23
NEW YORK	Southampton	New York	P. Nautucket, Mar. 24
OCEAN	Hamburg & Tyne	Philadelphia	Arr. Mar. 22
ORANJE PRINCE	Ensenada de Mota	Flushing	Arr. Mar. 21
ORIFLAMME	Rouen	Philadelphia	Arr. Mar. 4
OSCEOLA	Norfolk	Bluefields	L. Inagua, Feb. 22
OTTAWA	Philadelphia	London	P. Del. Break., Mar. 14
OURAL	Antwerp	Batoum	P. Finisterre, Mar. 15
PALEMBANG	Bangkok	Palembang	L. Jan. 10
PAULA	New York	Lisbon	L. Mar. 22
PECTAN	London	Galveston	P. Prawle Pt., Mar. 27
PENNOIL	Tyne	Philadelphia	Arr. Mar. 27
PERLAK	Palembang	Calcutta	Arr. Mar. 7
PETROLEUM	—	Gibraltar	Arr. Sept. 18

Vessel.	From.	For.	Latest Date and Position.
PHOEBUS	New York	Hamburg	Arr. Mar. 24
PINNA	Manchester	Cardiff	Arr. Mar. 2
POTOMAC	Sunderland	Philadelphia	P. Dunnet Head, Mar. 18
PROMETHEUS	London	New York	P. Dover, Mar. 22
PRUDENTIA	Cette	Rouen	L. Mar. 28
RION	Port Arthur (Texas)	London	L. Newport News, Mar. 21
ROCK LIGHT	Barrow	Kustendje	Arr. Mar. 25
ROSSIJA	Hamburg	Batoum	P. Dover, Mar. 24
ROTTERDAM	New York	Rotterdam	Arr. Mar. 18
RUSSIAN PRINCE	Boston	—	At Havana, Mar. 15
SALAHADJI	Singapore	Sanga Sanga	L. Jan. 21
SEMINOLE	Calcutta	San Francisco	L. Singapore, Feb. 25
SILVERLIP	Port Arthur (Texas)	—	L. Mar. 24
SINGU	Bombay	Rangoon	L. Feb. 28
SNOWFLAKE	Hull	Philadelphia	P. Dunnet Head, Mar. 15
SOPHIE	Novorossisk	Tunis	L. Malta, Mar. 18
SPONDILUS	Singapore	—	L. Mar. 26
STANDARD	Philadelphia	Swinemunde	L. Mar. 20
STROMBUS	Bremerhaven	Cardiff	Arr. Mar. 21
SURAM	Batoum	London	P. Tarifa, Mar. 28
SUWANEE	New York	London	Arr. Mar. 28
SVIET	Alexandria	Odessa	Arr. Feb. 16
TELENA	Singapore	—	L, Table Bay, Mar. 11
TEREK	Manchester	Batoum	P. Gibraltar, Mar. 28
TIFLIS	Cette	Novorossisk	Cl. Const'iple, Mar. 20
TIOGA	Batoum	Liverpool	Arr. Nov. 25
TONAWANDA	New York	Bombay	Arr. Mar. 16
TROCAS	Kobe	Yokohama	Arr. Mar. 27
TURBO	Cardiff	Philadelphia	Arr. Mar. 26
TUSCARORA	New York	Calcutta	At Suez, Mar. 22
TWINGONE	Rangoon	Tuticorin	L. Feb. 23
VEDRA	Hamburg	Tyne	Arr. Mar. 14
VILLE DE DIEPPE	Philadelphia	Dieppe	Arr. Mar. 15
VILLE DE DOUAI	Calais	Dunkirk	Arr. Feb. 1
VOLUTE	Palembang	—	L. Mar. 24
*WEEHAWKEN	Sumatra	Port Natal	Arr. Mar. 14
WILLKOMMEN	Stettin	New York	Arr. Mar. 28
WINNEBAGO (Late KINSMAN)	Bombay	SanFrancisco	Arr. Mar. 27

* Supposed sailed March 14 and 15 after coaling.

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

March 30th, 1906.

Petroleum is unchanged in price since our last report, and the quotations remain as follows :—

Russian, 5¾d.; American, 6d.; Water White, 7½d.; and Roumanian, 5¾d.

LUBRICATING OILS.

are unchanged as follows :—

American pale, £7 15s. to £9 10s.
American dark cylinder, from £7 10s.
American filtered cylinder, from £11.
Shellene, £5.

TURPENTINE.

American Turpentine has been fairly firm during the week, although there is little business doing. For Spot, the prevailing price during the week has been about 47s., but it is now a little easier and quoted 46s. 6d.

LIVERPOOL OIL MARKET.

March 29th.

Refined oils are quiet, but sellers now quote 6½d. for Russian and 6⅝d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, March 29th.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, March 29th.

Standard White is quoted at 7·55.

RUSSIA.

Baku, March 27th.

The Baku oil market remains under the influence of the small February output, and prices have advanced still further. Heavy Balakhany crude oil is quoted 30-30¼ copecs; residuals, in ships, 31 copecs per pood.

BELGIUM.

Antwerp, March 24th.

The petroleum market is unchanged. Price of Standard White, spot, March, 19¾ francs; April-May, 20 francs.

GERMANY.

Hamburg, March 24th.

The kerosene market is weak. The price of American Standard White is 7·10 marks per 50 kilos.

ROUMANIA.

March 24th.

Prices of petroleum products inland are :—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	3·35-3·40
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery	3·00- —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octro' tax of 12 fcs. per 100 kilos.

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
„ sp. gr. 0·720-0·725	8·00- 9·00
„ sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

Bombay, March 3rd.

There has been no change in prices of Burma oils since our last report, but the tendency is firmer.

American, "Snowflake," 150 deg.	Rs. 6	0	2
„ Chester, 125 deg.	4	8	2
„ Monkey Brand, 125 deg.	4	2	2
Russian, "Anchor," 125 deg.	4	14	6
„ "White Camelia" brand, 125 deg.	4	0	2
„ "Rising Sun," bulk, in local made tins	3	14	0
„ "Elephant" brand, in local made tins	3	10	0
„ Bulk, in Bombay Bazaar, 125 deg. per 10 gallons	3	3	0
Borneo oil in bulk	2	14	6
Burma Oil, in bulk, per 8 imperial gallons	2	11	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

FOR THE WEEK ENDED MARCH 27th, 1906.

Specially prepared for this Journal by . . . the Custom House.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Mar. 21	London	Anglo-American Oil Co	Prometheus	Bulk	Lamp	998,390	New York
,, 21	,,	Scott's Wharf	Minneopolis	50 brls.	Lub.	2,000	,,
,, 21	,,	T. H. Lee	Starling	3 casks	Lamp	180	Rotterdam
,, 22	,,	London Oil Storage Co.	Vesta	39 pks.	Lub.	1,900	Hamburg
,, 22	,,	G. W. Sheldon and Co.	Plover	4 brls.	,,	180	Antwerp
,, 22	,,	Vacuum Oil Co.	Minneapolis	878 brls. 60 ½-brls.	,,	35,320	New York
,, 22	,,	Anglo-American Oil Co.	,,	1529 brls.	,,	61,600	,,
,, 22	,,	C. Jerome Dyer	,,	500 brls.	,,	20,000	,,
,, 23	,,	London and India Docks Co	,,	165 brls.	,,	6,600	,,
,, 23	,,	A. Haacke and Co.	,,	20 brls.	,,	800	,,
,, 23	,,	Consolidated Petroleum Co.	Kura	Bulk	Gas	252,000	Philadelphia
,, 23	,,	G. L. Woodcock	Jago	483 brls.	Lub.	19,320	Trieste
,, 24	,,	H. Finkler and Co.	,,	800 brls.	,,	32,000	,,
,, 24	,,	A. Brown and Co.	,,	175 brls.	,,	7,000	,,
,, 24	,,	Grindley and Co.	Minneapolis	50 brls.	,,	2,000	New York
,, 24	,,	Anglo-American Oil Co.	Suwanee	Bulk	Pet. Spirit	947,360	,,
,, 24	,,	,,	Narragansett	Bulk	Lub.	51,400	,,
,, 24	,,	,,	,,	Bulk 1500 brls.	,,	2,798,600	,,
,, 24	,,	Vacuum Oil Co.	East Point	120 brls.	,,	4,800	Philadelphia
,, 24	,,	T. H. Lee	Balgownie	15 pks.	,,	490	Hamburg
,, 26	,,	G. W. Sheldon and Co.	Ptarmigan	6 pks.	,,	250	Antwerp
,, 26	,,	,,	Minnetonka	106 pks.	,,	530	New York
,, 26	,,	Juett and Cain	,,	120 brls.	,,	4,800	,,
,, 26	,,	Mordaunt Bros.	,,	120 brls.	,,	5,000	,,
,, 26	,,	Humphrey and Co.	,,	175 pks.	,,	7,040	,,
,, 26	,,	Mordaunt Bros.	East Point	250 brls.	,,	10,100	Philadelphia
,, 26	,,	J. Harrison	Hardy	25 pks.	,,	600	Treport
,, 26	,,	London Oil Storage Co.	Vesta	134 pks.	,,	4,330	Hamburg
,, 27	,,	Schliemann's Oil Co.	East Point	60 brls.	,,	3,000	Philadelphia
,, 27	,,	W. Balchin	,,	200 brls.	,,	8,000	,,
,, 27	,,	Anglo-American Oil Co.	Suwanee	Bulk	Lamp	130,780	New York
,, 27	,,	J. Spurling	Albatross	25 brls.	Lub.	1,000	Hamburg
,, 21	Liverpool	Crew, Levick Co.	Noordland	30 brls.	,,	1,270	Philadelphia
,, 21	,,	,,	Nerissa	785 brls.	,,	32,960	,,
,, 21	,,	W. B. Dick and Co.	,,	150 brls.	,,	6,840	,,
,, 21	,,	Worthington and Boler	,,	10 brls	,,	400	,,
,, 23	,,	Meade-King, Robinson and Co.	,,	2350 brls.	,,	94,000	,,
,, 23	,,	Liverpool Storage Co.	,,	1560 brls	,,	61,600	,,
,, 23	,,	,,	,,	150 brls.	Min. Colz.	6,000	,,
,, 23	,,	Pure Oil Co.	,,	266 brls.	Lub.	10,640	,,
,, 23	,,	Meade-King, Robinson and Co.	Abbotsford	385 brls.	Pet. Spirit	19,250	Rotterdam
,, 23	,,	Cunard Steam Shipping Co.	Carmania	631 brls.	Lub.	22,680	New York
,, 24	,,	,,	Lucania	170 brls.	,,	6,800	,,
,, 24	,,	Anglo-American Oil Co.	Delaware	Bulk	Lamp	1,281,600	Philadelphia
,, 24	,,	Meade-King, Robinson and Co.	Ulstermore	60 brls.	Lub.	2,400	Baltimore
,, 26	,,	Valvoline Oil Co.	Lucania	53 brls.	,,	2,050	New York
,, 27	,,	Crew, Levick Co.	Merion	45 brls.	,,	1,900	Philadelphia
,, 27	,,	Huxley and Co.	Rhineland	12 brls.	Crude	480	Hamburg

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To Dealers only.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Mar. 27	Liverpool	Meade-King, Robinson and Co.	Rhineland	300 brls.	Lub.	12,000	Hamburg
,, 27	,,	Dee Oil Co.	Nyroca	6 brls.	,,	240	Antwerp
,, 27	,,	C. W. Field	,,	10 brls.	,,	410	,,
,, 22	Barrow	Anglo-American Oil Co.	Washington	Bulk	Lamp	671,800	Philadelphia
,, 22	,,	,,	,,	Bulk	Pet. Spirit	756,020	,,
,, 22	Bristol	Pickford's Ltd.	City of Liverpool	72 brls.	Lub.	250	Hamburg
,, 26	,,	Mordaunt Bros.	Chicago City	60 brls.	,,	2,400	New York
,, 26	,,	W. Smith and Co.	,,	875 brls.	,,	35,000	,,
,, 26	,,	,,	,,	623 brls.	Lamp	24,920	,,
,, 22	Goole	Goole Steamship Co.	Nidd	26 brls.	Lub.	1,040	Antwerp
,, 21	Manchester	J. T. Fletcher and Co.	Pandion	19 brls.	,,	760	,,
,, 24	,,	Manchester Liners	Man. Corporation	60 brls.	,,	2,400	Philadelphia
,, 26	,,	Meade-King, Robinson and Co.	Westmoreland	308 brls.	,,	12,720	Hamburg
,, 21	Plymouth	Plymouth and Stonehouse Gas Co.	Kura	Bulk	Gas	663,700	Philadeldhia
,, 22	Shields, S.	Anglo-American Oil Co.	Potomac	Bulk 1000 cases	Lamp	615,600	New York
,, 23	Southampton	Barringer and Son	Prometheus	Bulk	,,	1,186,220	,,
,, 23	Sunderland	Auglo-American Oil Co.	Potomac	Bulk	,,	614,600	,,
,, 22	Swansea	Burgess & Co.	Llandaff City	25 bls.	Lub.	1,000	,,
,, 22	Glasgow	Anchor Line	Caledonia	1431 pks.	,,	55,830	,,
,, 22	,,	,,	,,	50 brls.	Min. Colz.	2,000	,,
,, 22	,,	J. and A. Allan	Buenos Ayrean	200 brls.	,,	8,000	Philadelphia
,, 22	,,	,,	,,	1842 pks.	Lub.	89,360	,,
,, 22	,,	,	Laurentian	2122 pks.	,,	107,090	,,
,, 22	,,	,,	,,	100 br s.	Min. Colz	5,000	,,
,, 26	,,	J. D. Smellie	Abbotsford	450 brls.	Pet. Spirit	22,500	Rotterdam
,, 22	Grangemouth	Graham Yooll and Co.	Staffa	50 brls.	Lamp	2,000	Hamburg
,, 23	,,	J. Currie and Co.	Coburg	50 brls.	,,	2,000	,,
,, 22	Leith	W. G. Yooll and Co.	Coblenz	76 brls.	,,	3,310	,,
,, 22	,,	W. Gibson and Sons	Nigel	16 casks	Lub.	600	Antwerp
,, 22	,,	Graham-Yooll and Co.	Savona	50 brls.	Lamp	2,180	Hamburg
,, 22	,,	J. Currie and Co.	Breslau	58 pks.	Lub.	960	,,
,, 26	Lerwick	Olna Whaling Co.	Tronda	5 brls.	,,	200	Tonsberg
					Net Total	11,860,330	

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO MARCH 27th, 1906.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan. 1.	This Week.	From Jan 1.
Austria	—	874,560	58,320	266,310	—	11,000	—	—	—	—	—	—	—	—	58,320	1,162,870
Belgium	—	240	3,480	108,530	—	11,000	—	—	—	2,030	—	—	—	1,416	3,480	112,216
Borneo	—	210	—	—	—	—	—	—	—	1,849,150	—	240	—	—	—	1,849,600
Canada	—	—	—	8,000	—	20,000	—	—	—	—	—	—	—	—	—	28,000
Germany	9,490	735,620	33,650	425,340	—	—	—	—	—	2,320	—	—	—	4,980	43,620	1,178,740
Holland	180	180	—	920	—	—	—	—	41,750	1,015,480	—	98,200	480	12,120	41,930	1,126,420
Roumania	—	1,360,000	—	—	—	—	—	—	—	—	—	—	—	—	—	1,360,000
Russia	—	7,255,760	—	48,480	—	—	—	758,500	—	—	—	—	—	5,410	—	8,068,150
Sumatra, &c	—	—	—	—	—	—	—	—	—	930,000	—	—	—	—	—	930,000
U.S.A.	5,523,910	20,563,357	3,558,210	13,586,714	—	523,328	915,700	11,831,180	1,703,380	2,772,560	—	5,902,880	21,000	327,610	11,722,200	55,497,539
Other Countries	—	490	800	6,520	—	—	—	—	—	480	—	—	—	210,800	800	2 8' 90
	5,533,580	30,790,417	3,654 460	14,450,814	—	565,238	915,700	12,589,680	1,745,130	6,572,020	—	6,001,320	21,480	562,536	11,870,350	71,531,825

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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XIV. *(New Series.)* April 14th, 1906. No. 370.

Editorial Notes.

TO OUR READERS.

The "Petroleum Review" will, in future, be published fortnightly, and will be posted in time to reach subscribers by the first post every alternate Saturday morning. Reference to the alteration in our publishing day and to the improved appearance of the journal will be found in our leader columns.

How Baku Producing Firms fared in 1905.

In recent issues we have shewn the approximate decline that has taken place in the production of many of the operating firms at Baku during the past year, but we are now able to publish the official figures of the production of all the firms in Baku for 1905, whose output has been upwards of 1,000,000 poods. These figures, which will be found upon another page, need little comment here. They make it clear, however, that the production has in many cases dwindled in a most alarming manner, but how far the cause for this can be laid upon the riots, we dare not say. The greatest loser in production during the past year has been the Russian Petroleum and Liquid Fuel Co., for the decline here when compared with the output of the previous year amounts to about 53 per cent., as against the Caspian and Black Sea Society's 50 per cent., Mantascheft's 47 per cent., the Baku Russian Petroleum Co.'s 40 per cent., the Caspian Society's 41 per cent., and Nobel's 36 per cent. In looking through the small losers, it will be noticed that the Baku Naphtha Co. only lost 15 per cent. of their production, while the Moscow Caucasian Co. and a few others shew gains, the gain in the case just mentioned amounting to nearly 5,000,000 poods. The list of the complete totals will well repay perusal.

Continued Progress in Borneo.

The statistical details of the operations of the Nederlandsch Industrie en Handel Maatschappij, the Dutch concern of the "Shell" Transport and Trading Co. in the Borneo fields, during the first three months of this year tell the same gratifying progress which has been characteristic of the company since Borneo became an important factor in the world's supply of petroleum. In regard to production, the figures shew that when compared with the corresponding period of a year ago, there has been an increase during the first thirteen weeks of this year of over 20,000 tons, the actual production of crude oil being 115,290 tons. The official remarks which accompany the statistics are very significant, for it is pointed out that, owing to congestion on the fields and at the various marketing centres, there has been a destruction during the three months of nearly 9,000 tons of crude oil and over 12,000 tons of products, 5,510 tons of benzine alone being destroyed. This announcement can scarcely be taken as gratifying, though it unmistakably proves the ability of Borneo to occupy a still more important place among producing countries. The interesting details will be found upon the next page.

German Capital in the Galician Petroleum Industry.

Although not so large as in Roumania, the German investments in the petroleum industry of Galicia are considerable, and are steadily growing in importance. In contrast to Roumania, where it is principally the large German banks who have come in, the German investors who have lately acquired an interest in the Galician petroleum industry are mostly private capitalists. Of the companies and firms who are working on practically exclusively German capital, the following may be mentioned:—Messrs. Würzburg and Hahn, who are drilling on the Panska Road at Boryslaw; the Siriuswerke Co., formed by Messrs. W. Mertens and Co., who are drilling at Tustanowice on the property taken over from Messrs. Liebermann and Barth, and at Boryslaw, and have also acquired a large tract of petroliferous land at Gliwic; Lanpenmuehleu and Co. and the Escomptegesellschaft are drilling at Tustanowice; the Berliner Naphtaindustrie-Gesellschaft and the Deutsch-Oesterreichische Petroleumwerke are likewise drilling at Tustanowice. The founders of the last-named company, Messrs. Löske, Schneeberg and Co., have acquired a large tract of land at Ratoczyna, and started exploiting the same by means of two borings. Mr. Ernst Linarzt, of Berlin, is drilling at Boryslaw, and the Dessaner Bank are drilling at Nienaszow. Quite recently the Berliner Tiefbohrgesellschaft have acquired the oil properties at Harklowa, and formed the Deutsch-Galizische Petroleum A.G. "Harklowa," with a capital of 1,500,000 marks. Previously the "Opaka" Co. was formed by a Hamburg firm, which, however, has not achieved any success, but lastly, there are to be mentioned Messrs. H. Compez and Co., who have a good property at Pasieczna, where they are drilling two boreholes.

Apart from the above, German capitalists are also interested in individual enterprises at Boryslaw, and particularly at Tustanowice, and Berlin is now considered the best place for the sale of shares in Galician undertakings, some of them, by the way, of a doubtful character.

America's February Petroleum Exports.

Though the exports of American petroleum for the month of February shewed considerable decline from the figures of January, they were much in excess of those for a corresponding period a year ago, totalling 80,000,000 gallons. As can be seen by a glance at the table which appears among our

American news, the month's exports were made up as follows:—Crude, 12,494,870 gallons; naphthas, 991,770 gallons; lubricating oil and paraffin 13,932,596 gallons; and residuum, 5,054,578 gallons. When placed alongside the figures of February, 1905, the exports shew a marked increase, particularly in the case of crude and lubricating oil. Shippers attribute the decline from the figures reached during the first month of the present year to be due to the position of the tank fleet, as most of the tankers toward the close of the month were either this side of the ocean or on their way to America for fresh cargoes.

This Week's Imports of Petroleum.

Owing to the Easter holidays, the Review has had to go to press considerably earlier than has been the case hitherto, and consequently we are unable to publish the full detailed imports of petroleum into the United Kingdom for the present week. From the details, however, which we have just received, there were imported into this country from the 4th to the 9th inst., 4,954,170 gallons of petroleum products, and of this quantity over one-third was carried by the "Cymbeline" from Batoum in the shape of illuminating oil. During the week no petroleum spirit has been imported.

The Sale of Austrian Oil in Germany.

In the negotiations for the renewal of the commercial treaty between Austria-Hungary and Germany, the representatives of the first-named country have put forward the demand for the removal of the differential railway rates allowed by the German State railways to Russian oil to the disadvantage of the Austrian product. According to *Naphta*, the Austro-Hungarian representatives have so far elicited the promise that when the new commercial treaty comes into force, Austrian petroleum oils will be granted the same rate as is charged to Russian oil. This will materially reduce the cost of delivery of Austrian oil to the German markets, and to the same extent improve the chances of the Austrian oil being able to successfully compete with the oils of other countries. Coupled with the greatly reduced railway rate which the Austro-Hungarian State railways have granted for petroleum oils exported to Germany, this promised concession from Germany would enable Austrian oil to penetrate to the German Baltic ports, even at times when the state of the rivers renders water transport impracticable. A great development in the sale of Austrian oil on the German market, therefore, can now be confidently expected in the near future.

PRODUCTION OF THE NEDERLANDSCHE INDUSTRIE EN HANDEL MAATSCHAPPIJ.

STATISTICS FOR THE FIRST QUARTER OF 1906.

The statistical cables received by the Nederlandsch Industrie en Handel Maatschappij (London office) from the fields in Borneo for the first thirteen weeks of the years 1906 and 1905, and which we have been specially favoured with, shew the following figures:—

	1906. In tons.	1905. In tons.
Production—		
Crude Oil	115,290	95,070
Crude Oil Sold	—	21,210
Intake of Refineries, Crude Oil ..	79,548	63,735
Output of Refineries—		
Kerosene	28,099	23,340
Other Products	42,732	30,260
Shipments—		
Kerosene	23,333	24,100
Other Products	34,649	34,888
	31st March, 1906.	1st April, 1905.
Crude Oil in Stock above ground..	73,414	33,430
Stocks awaiting Shipment—		
Kerosene	35,887	7,645
Other Products	19,375	7,925

The official remarks are:—"Congestion of storage on the fields and at the marketing centres compelled the practical shutting down of the Balik Pappan refinery from the 19th February to the 31st of March, and the destruction of 8,700 tons of crude oil; 5,510 tons of benzine; and 6,800 tons of liquid fuel; or a total of 21,010 tons."

THE OPERATIONS OF THE BAKU REFINERIES.

STATISTICS FOR SEPTEMBER AND OCTOBER, 1905 (in poods).

I.—Manufacture of Illuminating Oils.

Distillation.

	Submitted to Distillation.			Products Received.				
	Crude.	Other Products.	Total.	Kerosene.	Residuals.	Other Products.	Loss.	Fuel used.
September ..	804,981	—	804,011	137,894	485,251	17,153	163,713	191,950
October	3,769,624	—	3,769,624	1,080,033	2,428,081	143,742	117,768	378,485

Refining.

	Submitted to Refining.			Refined Products Obtained.			Chemicals used.	
	Kerosene.	Other Distillates.	Total.	Kerosene.	Other Products.	Loss in Refining.	Acid.	Soda.
September ..	634,988	1,150	636,138	613,605	1,116	21,417	3,220	1,527
October	1,335,199	55,210	1,390,409	1,294,481	50,693	45,235	7,292	2,439

II.—Manufacture of Lubricating Oils.

Distillates Received.

	Machine Oil.	Spindle Oil.	Cylinder Oil.	Goudron.	Solar Distillates.	Residuals.	Other Distillates.	Loss in Distilling.	Fuel used.
September ..	—	—	—	—	—	—	—	—	119,973
October	12,852	3,410	6,571	80,355	5,400	—	—	90,635	29,741

Refined Products Received.

	Spindle Oil.	Machine Oil.	Cylinder Oil.	Loss in Refining.	Chemicals used. Acid.	Chemicals used. Soda.
September	4,488	186,746	—	22,400	6,639	997
October	39,209	91,862	5,469	14,513	1,462	657

There was no benzine distillate produced in October, whilst the output of refined benzine was 2,221 poods against 10,070 poods in September. The total output of solar distillates was 94,321 poods.

The BAKU RUSSIAN PETROLEUM COMPANY
LIMITED.

Another Extraordinary Meeting of Shareholders.

The agitation against the present management of the Baku Russian Petroleum Co., Ltd., was carried a step further on Monday last, when at Winchester House, E.C., an extraordinary meeting of the shareholders was held in compliance with requisitions signed by shareholders owning more than one-tenth of the capital of the company.

The meeting was called for the purpose of considering the following resolutions:—

1. Declaring that the existing board of the company no longer commands the confidence of the shareholders, and calling upon the members of the board to resign their offices.
2. Removing the several members of the board, namely, Lieut.-Col. Ivor Phillips, Messrs. H. N. Gladstone, C. H. Moore, C. F. H. Leslie, and S. J. Hogg, from the office of director.
3. Reducing the number of directors to such number as the meeting may think proper.
4. Appointing such number of qualified members of the company as the meeting may think fit to fill up all or any of the vacancies on the board.
5. Appointing such members of the company as the meeting may think proper as a temporary committee of management, with power for such committee or a majority in number of them to exercise, for such period as the meeting may determine, such of the powers vested by the articles in the board of directors as the meeting may think fit.
6. Directing the temporary committee of management to take steps for securing the services of qualified members of the company as directors, and to summon such further meeting or meetings of the company as may be considered desirable for the purpose of reconstituting the board of directors.
7. That the services of Mr. Urquhart, the present manager of the company, be dispensed with forthwith, and that he be replaced by a new manager, who shall be bound to devote himself to the business of the company exclusively and shall reside in Baku.

The chairman of the company—Col. Ivor Philipps, M.P.—took the chair, being supported by a full board.

After the notice convening the meeting had been read by the Secretary, a letter was also read from Mr. J. Compton Rickett, M.P., in which the writer apologised for being unable to attend the proceedings. Referring to the past conduct of the company, he stated that no doubt there were matters concerning capital and commissions paid for service which are open to comment, more particularly in the light of subsequent events.

The Chairman made a lengthy speech in defence of the past policy of the directorate, and amid a number of interruptions, went out of his way to personally attack a number of the gentlemen who have been assisting in the conduct of the agitation, He then called upon Dr. Dvorkovitz to move his resolutions.

Dr. Dvorkovitz, who, on rising, was loudly applauded, said the meeting had been called at the request of about 625 shareholders, many of whom had a very large holding in the company, and they were therefore anxious that its affairs should be placed upon a more satisfactory footing than at present. He mentioned this by way of pointing out that the opposition to the present directorate was not as some had described it of an anonymous character. The names of those who were responsible for the calling of the meeting were at the disposal of any shareholder who desired. They had just listened to a very interesting speech from the chairman, who had occupied fifty minutes in delivering it. But interesting and lengthy as that speech was, the chairman had not touched one single point mentioned in the circular. In that circular there were a number of points on which explanation from the directorate was necessary if the company was to be efficiently managed and the interests of the shareholders were to be properly safeguarded. He and those acting with him had based their requisition to the board, not on their own statements, but on the statements of the Committee, including a statement that the promoters made a profit of £400,000, and at the same time only £50,000 was left for working capital. That, the speaker emphasised, was not his statement, but that of the Committee, which had also stated that that amount of working capital was wholly inadequate, and that owing to this fact, the company had had to part with their refinery. Then, again, the Committee directed attention to the fact that the company ought to be conducted upon more economical lines. The present agitation had been based upon the findings of the Committee. Once the circular had been sent out they ought to have received a reply from the chairman explaining matters from the point of view of the directors, but that reply had not been forthcoming, and so the only course was to have a meeting of the shareholders at which the chairman should give them the desired explanation. Some statement had been made as to his motives in commencing that agitation, but he could assure them that his only motive was the interest of the company and the petroleum industry. He certainly was not in a position to take an appointment of director even if it were offered him, not being qualified in point of shareholding. He did not think it necessary to enter at length upon the history of the company, but he might be excused for pointing out that the chairman naturally felt that he had to defend his colleagues. He personally had no fault to find with the chairman on that matter, but at the same time the meeting had a right to expect that the chairman would meet point by point the matters raised in the circular, and afford them all the information at his disposal. Instead of this, he had tried to divert attention by referring to the motives the speaker had in the action he had taken, and so he (Dr. Dvorkovitz) had to repeat that he was entirely actuated by the best possible motives. He did not wish to force his opinions upon the shareholders or upon the directors, but since the chairman had referred to his motives, might he in turn ask what the motives of the chairman were in occupying the position he did? The question was not one of motives, but as to whether the statements of those who raised the agitation were founded upon fact. If they were, then he had only to say that the question as to reform would rest between the shareholders and the directors. He had called meetings in Lancashire and Yorkshire, and at each of these resolutions were unanimously passed in favour of the course set forth in the resolutions.

Reference had been made to the employment of Mr. Urquhart as general manager, and an effort had been made that he (Dr. Dvorkovitz) was opposed to Mr. Urquhart personally. He desired to entirely repudiate this. Mr. Urquhart had proved himself a very brave man, but the question at this point happened to be not one of bravery but of management, and however much of a genius he might be, it was beyond his ability to satisfactorily manage four companies at once. He put it to the shareholders whether it was businesslike or tended to efficiency for three or four companies—each of them competitive—to be managed by one person. Surely there were plenty of Englishmen quite qualified to manage each of the companies? When he was appointed, Mr. Urquhart was recommended by the Chairman, because being a Scotsman he would be very economical. But it occurred to him that that had not been so. If, however, the Chairman had a great preference for a Scotsman, then he believed he could get a couple of good Scotsmen for the price. (Hear, hear.)

It had been asserted that the agitation had had its orgin in an attempt to get the control of the company into the hands of foreigners. This was absolutely untrue. Russians had all along been delighted to receive English capital, and they were still anxious that the English capitalist should take an interest in the country's vast mineral wealth. They as shareholders ought to have people acting for them as directors whom they could look up to. He objected to a man acting as manager who could not exclusively devote all his time to the business of the company.

Concluding, the speaker said he had been fighting the battle of the shareholders, and what they in Lancashire and Yorkshire desired was that they should have their own representatives on the board. Personally, he had not nominated them, because it had been stated by the chairman that anyone nominated by himself would be refused. (Shame.) The question was, would the board accept the nominees on behalf of the Lancashire and Yorkshire shareholders, whose names had been put forward by the independent local committees of shareholders. If he would not consent to this, then he would move the first resolution. He might mention that the majority of the chairman's proxies (529) were in the form of vendors' votes, so as far as the number of shareholders were concerned, he (the speaker) was in the majority by holding 825 proxies.

A Shareholder: That is a matter to be decided by the meeting.

The Chairman: I cannot see my way to accept your suggestion.

Dr. Dvorkovitz then moved the first resolution as under: "That this meeting declares that the existing board of the company no longer commands the confidence of the shareholders, and that the members of the board be, and they are hereby, called upon to resign their office." (Applause.)

Dr. Whitty seconded the resolution.

Sir Annesley De Renzy defended Mr. Tweedy from the chairman's adverse comments, and declared that if that gentleman had made any mistake in estimating the output of oil it was not for the purpose of deceiving anyone, as might be supposed from what the chairman had said. He declared that he lost his confidence in the board owing to the facts disclosed by the sub-committee. He proceeded to read a letter from Messrs. Ogilvy, Gillander and Co. to Mr. Tweedy, dated December 11th, 1903, offering to give that gentleman 1¼ per cent. of the commission of 2½ per cent. which they received from the Russian Petroleum and Liquid Fuel Co.

Dr. Whitty said he would like to ask, before the resolution was proceeded with, whether the board would be willing to accept the two gentlemen who had been selected by the Lancashire and Yorkshire committees to represent them on the board—viz., Mr. Bain and Mr. Diamond.

A Shareholder: Has he anything to do with the Sewing Cotton Co?

Dr. Whitty replied in the affirmative.

Mr. Charles Diamond proceeded to address the meeting. He stated that up to a few days ago he knew nothing of the affairs of this company, and he was not a shareholder. He attended the meeting by the request of the Lancashire committee, who asked him whether he would be willing to represent their interests on the board.

The Chairman said he had been asked a question by Dr. Whitty as to the board's accepting the two representatives from Lancashire and Yorkshire.

Mr. Lea Smith: I suggest that you ought not to answer that question, as the matter is in the hands of the meeting.

The Chairman said he was going to give an answer to that effect.

Mr. Fernie said the Manchester meeting came to the conclusion that there was only one thing that could save the company, and that was to call in the aid of a really strong man as a director—one who would represent not merely the interest of the directors, but of the shareholders generally. He supported the nomination of Mr. Diamond.

Mr. Holzapfel remarked that if the board decided to eliminate from its numbers a certain influence which still remained, he thought the whole agitation would stop. He did not know any gentleman connected with the board; he believed they all had a first-class commercial reputation; but he thought the interests of the shareholders had been sacrified not only with regard to the promotion, but in regard to the payment of commissions.

Mr. Tweedy said he thought that the Chairman in his ignorance of the business had made a very unwise and very improper statement with regard to himself. In the first place, was it likely that a man who had resisted the temptation of at least £25,000, would do anything against the interests of the shareholders?

Mr. Tweedy quoted from original letters the following extracts in confirmation of his statements:

On the 11th December, 1903, Mr. Gladstone's firm wrote to his firm:—

> "We are willing to make you an allowance of 1¼ per cent. on the price received f.o.b. Batoum."

In spite of this, he (Mr. Tweedy) telegraphed on the 12th December, protesting against the business and characterising it as an attempt to make money out of the company, and that it would end in disaster.

On 15th and 19th December, 1903, he had to tell the same tale. On the 25th December, 1903, he wrote to the chairman of the Russian Co., which had the control of the marketing and refining of the Baku Co.'s oil as follows:—

> "Personally, I have everything to gain by supporting the schemes. The proposed business is for joint account of Ogilvy Gillanders (Gladstone's firm) and Bifold (my firm), and you will understand I would have gained very considerably by the transactions. The temptation to make money by supporting proposals which involve Oleum, in hazarduos risks, had, however, no influence with me, and whether I remain connected with Oleum or not, I shall never regret the motive for my action. I was caught with the E.O.A., but never again if I can prevent it."

Mr. Tweedy went on to say that he bought shares up to the very time he left Baku in May, 1904.

He denied that the agitation was got up by him and Dr. Whitty, and with regard to the statement made by the Chairman that the agitation was got up for the purpose of getting your property into the hands of foreigners, he stated that he knew nothing of the proposal made by Dr, Whitty, nor did he know Dr. Whitty personally until some time after the previous meeting.

In 1904, however, he did make a proposal, but he pointed out that this proposal was of such a character that the shareholders could at once see that he had their interests at heart even then.

Mr. Tweedy said: What was this proposal? It was to lease your property for 10 years with 5½ per cent. interest to the preference shareholders, and 5 per cent. interest to the ordinary shareholders, thus making £73,250, plus £72,000 a year depreciation, with the option of purchase for £1,000,000 cash within two years; therefore, under this offer the shareholders would have received either £732,500 profits, plus £720,000 depreciation by the end of 10 years, and their property back or £1,000,000 cash in two years.

He went on to say that to-day the company would have had in hand £109,875 profits, plus £108,000 depreciation, also £100,000 deposit as security for the fulfilment of the contract, or a total of £317,875. Compare this with the position of the company to-day, and the shareholders would at once see how much better off they would have been if the offer had been accepted.

The board declined the offer guided by their manager whose personal interests were dead against the business because he would not have been manager, and of course the directors would have lost their £4,000 a year fees, Mr. Leslie's firm their £1,500 a year, and Mr. Gladstone's firm their commissions.

The directors did not even make a counter proposal.

With regard to the management, Mr. Tweedy pointed out that for the three years ending 1903 the average market price of the oil in Baku was only 9s. 6d. per ton, whereas in 1904 the price was 19s. 8d., and in 1905, 27s. To-day the price was 37s., but taking the actual production during the years 1904 and 1905, you will find that if proper action had been taken to secure the market price, the company would have had £437,000 in hand.

In spite of continuous controversy with Mr. Gladstone with regard to marketing the oil the company had obtained up to 1903 the full market value.

Mr. Tweedy went on to say it was easy to criticise after the event, but the board received a letter from an expert in Baku in October, 1904, setting out clearly what the result of their actions would be, and the fact that the results have proved the writer to be correct is the best evidence they could have of his judgment,

Mr. Tweedy concluded by saying that he opposed Mr. Gladstone's schemes, although it was against his own personal interests to do so. He further added that he had documents to prove the truth of his assertions, and these documents were at the disposal of the shareholders, and he would be glad to have his action submitted to an impartial jury.

He further quoted from a letter, written early in 1903, to a friend who was largely interested:—

> "I think we are gradually getting out of our troubles, but where we should have been if the intense friction on the board had continued, I do not know. Gladstone would certainly have ruined the company."

Dr. Whitty said they had heard a great many speeches, every one of which had wandered away from the point. They did not want to go into the past. It had been fully investigated by that Committee which he and those associated with him considered to be packed in the interests of Mr. Gladstone. They gave their reasons at the time, and, while imputing nothing dishonourable to the gentlemen on the Committee, there was the fact that a large number of them were connected closely with members of the board, both in business relations and as members and co-directors of certain boards. Those gentlemen should not have been appointed, and, moreover, they were not themselves shareholders; they were representatives of shareholders. However, those gentlemen investigated the circumstances of the promotion and the management of the company up to date, with every desire to believe, and found that the causes of the present disastrous position of the company were the greed and rapacity of the promoters and the grave errors of judgment entering into contracts on the part of the board, and a want of knowledge on their part of the business. They also found that the various charges made by Dr. Dvorkovitz were practically substantiated, and there had not been one single one of those comments which they had made on the report which had been satisfactorily answered. Selfish motives had been imputed to them, and an attempt to hand the property over to foreigners. Well, the action they had taken in conducting that agitation would totally defeat the possibility of any such intention, if they ever intended it, but they had put their cards down on the table. Meetings had been held in Lancashire and Yorkshire, and the shareholders there elected representatives to select gentlemen to represent them on the board. What did it matter whether those who were selected were shareholders or not? How many of the directors were shareholders when they were made directors?

Mr. Diamond—he never met the gentleman until the other day—had been selected by the shareholders of Lancashire, and they were satisfied that he was the man they wanted. If they accepted a regularly nominated gentleman, why object to him? After the finding which they expressed as to the want of knowledge and the incompetence of the board, they even went on to make the utterly ridiculous suggestion that that same board should be entrusted with the re-organisation of the company. They had held all along that, inasmuch as they had failed so signally in the past and up to the present, there was no likelihood whatever that they would be more successful in future. There was no doubt whatever that the cases which had brought about the present state of affairs were the defective contracts which had been made. Had matters been properly managed, they would, with the present production that they were having and the present prices, have this year a sum of money sufficient, after paying the debenture and the preference interest, to give over 30 per cent. to the holders of the ordinary shares. And yet they were going to the bad. When the contract with the Russian Petroleum Co. was terminated, they went and entered into a similar contract with practically the same people, and they had, therefore, been deprived of the opportunity of benefiting by the higher prices of the oil.

With regard to the statement about Mr. Gladstone, he was induced to come into the company by the names of Mr. Gladstone and Sir James Kitson. He had no doubt as to the integrity of Mr. Gladstone, but, when he was made to sit down under the libellous statements that had been made about him, and made no efforts to refute them except by statements which were subsequently proved by the Committee to be untrue, he made no move to defend himself, and the Committee found that his firm had received £21,500 as their share of the commission. That statement was at least at variance with the statement made at the meeting. Mr. Gladstone had sat quiet under the imputations.

The whole point of their agitation was to take the property out of the management of the present board, and to enable a board to be appointed by the shareholders themselves, who wished this tried; and, even if they failed, they could not be worse than they were at the present time. When that conlract was terminated in August, they wanted to ensure that they should not enter into another contract.

Another gentleman and himself were strongly approached to settle that question. They heard what was publicly sail. Colonel Philipps expressed a desire to settle the business amicably. He asked him to disclose the names of the gentlemen they proposed to act. Tqose gentlemen had made it a condition that they should not be asked to sit with Mr. Gladstone on the board. He thought that ihe chairman was merely a figure-head, and that he had not the knowledge of the concern necessary. The whole of their agitation was Mr. Gladstone. Mr. Gladstone and Mr. Moore were the original directors, and if they and the men responsible for the state of affairs of the company would resign, that would settle the matter. Their resolution might be defeated, but he told them that, it they lost that day, their money was gone, they would never see a penny piece returned. There would be a repetition of the same contracts, of the same creation of debentures, which the promoting groups would get, but the shareholders would not have any of it, and the property would go from bad to worse.

Supposing that a series of bad years came again, and that the company was unable to find money to pay interest? The debenture holders would close on the property, and they were Mr. Gladstone's group and the directors. Mr. Gladstoue did not carry his shares at the time he came on, as the representatives of that committee would. Under no conceivable circumstances could the company be in a worse condition than it was now, and the only chance of saving it was to get an independent number of commercial men, who were not connected with any financial houses or corporations whatever, and who had no interest but to serve the shareholders.

Mr. Gladstone, in the course of a statement, declined to resign under any pressure. But if the board were reconstructed with commercial men of good business capacity, and they were of opinion that it would be disadvantageous to the company, that he should continue in his present position, then he would be pleased to be relieved of his duties.

The Chairman then put the resolution, with the result that it was lost, 34 votes being given for the resolution and 60 against.

Dr. Whitty and others demanded a poll.

In reply to the Chairman, Dr, Dvorkovitz and Dr. Whitty said they did not propose to proceed with the other resolutions.

The poll was taken and resulted thus: For the resolution, 217,411 votes; against the resolution, 624,190 votes.

The Chairman, consequently, announced that the resolution was lost.

The proceedings then terminated.

Of the previous meetings of the company during the agitation we have published in the "Review" verbatim reports of the whole proceedings, but seeing that the general, financial, and so-called trade press have seen fit to delete almost the whole of the discussion which did not favour the directors, we have deemed it necessary to furnish our readers with the proceedings of the above meeting so far as they affected the agitation, and have consequently ignored the defensive speeches made by members of the board. With these our readers will already be conversant, especially those having holdings in the Baku Co., for the directors have sent out specially prepared biased reports such as appeared in the financial press.

LATEST ITEMS FROM GROSNY.

The deepest well in the Grosny oil fields, and probably in the whole of Russia, has a depth of 2,751 feet. The last column of casing is of a 12 inch diameter, and moves quite freely. The well will be deepened further as far as it will be found possible. It belongs to the executors of V. R. Maximoff, and is situated on plot No. 15, on the extreme western limits of the oil fields.

* * *

The Grosny Oil Co. is neither drilling nor deepening any wells at the present time. They are merely doing some repair work. Drilling of the well on plot No. 14 has been stopped, pending the result of the work on plot No. 15.

* * *

The Moscow Co., after a long period of inactivity, which followed upon the period of working in old wells, is proposing to start three boreholes in the southern part of their property.

* * *

On the property of the Alkhan-Yurt Co., which is now leased by the executors of Maximoff, the long spell of inactivity has been terminated. Drilling is now proceeding in three wells, one being a new one.

* * *

The Anglo-Russian Maximoff Co. has laid down one new well, and is deepening three of their old wells; the deepest well there is 2,121 feet deep.

* * *

The Akhverdoff Co. is now drilling four new wells on the Yermoloff plot, which was lying idle for a long time before the modification in the terms of the lease. The company has also increased their boring activity on other plots. The spouters on plot No. 22 are now quiescent, and the total output at Grosny has consequently been reduced of late.

* * *

On the new plot No. 39 of the Kasbeck Syndicate two boreholes have been laid down.

* * *

The operations of the Spies Petroleum Co. centre mainly on plots Nos. 163 and 32, which after the exhaustion of plots Nos. 15 and 16, maintain the production of the firm, which now occupies the second place at Grosny. Mr. James MacGarvey's spouter on plot No. 72, after two years' activity has ceased flowing.

LIQUID FUEL.

By Sir MARCUS SAMUEL, Bart., J.P., D.L.

The following most interesting article appears in the anniversary issue of our contemporary, *Syren and Shipping*, from the pen of Sir Marcus Samuel, Bart., upon the question of liquid fuel :—

In spite of the many and undoubted advantages attending the use of liquid fuel, progress has been slow compared with that which might have been expected from the universal recognition which has been given to its advantages since the "Shell" Transport and Trading Co., Ltd., developed in Borneo a large production in 1897. An adequate supply for steamers in the Eastern trade has therefore been assured for many years, but a long period elapsed before the discovery of fields yielding a sufficient output to warrant its general use.

To-day, the position is entirely altered, and with large available quantities in Texas, developed in 1902; practically unlimited supplies in California, developed at a somewhat later date; and prospective supplies in Mexico; with supplies also available in normal times in Russia and from Roumania, the road appears open for a very wide adaptation of liquid fuel for marine engines.

Undoubtedly the development has owed much to the energy and enterprise of the "Shell" Transport and Trading Co., Ltd., who have for a period of years used it in their fleet consistently, and by its means have found it an economy to bring home steamers from Singapore *via* the Cape rather than through the Suez Canal. A few examples of the latest performances of steamers on long voyages and on shorter runs on liquid fuel cannot but be interesting :

The s.s. "Silverlip," in April, 1905, steamed from Singapore to Dover *via* the Cape. She did 48 days continuous steaming on a consumption of 36 tons per day. Her average speed was 10½ knots; her i.h.p., 2,300; and she carried a total deadweight of 10,300 tons.

The s.s. "Cardium," in January, 1905, steamed from Singapore to Dover *via* the Cape. For 50 days she steamed on a consumption of 32 tons per day; average speed 9¾ knots; i.h.p., 1,841; deadweight carried, 8,400 tons. In September, 1905, the same vessel went from London to Penang *via* Suez. She was 39 days steaming on a consumption of 29 tons per day, averaging 9¾ knots, and carrying 8,400 tons. This vessel on a similar voyage steamed at 9·1 knots on a consumption of 49 tons of coal

The s.s. "Bullmouth," in May, 1905, went from Palembang to Hong Kong, seven days steaming, on a consumption of oil of 17 tons per day; average speed, 9¾ knots; deadweight carried, 5,800 tons; i.h.p, 1,026. This vessel, in the hands of a careful and capable engineer, has gradually, but constantly and steadily, improved her performance, and there is no doubt that experience with liquid fuel increases its economical use. The normal consumption of the "Bullmouth" is 27 tons of coal per day.

In a short article such as this, I will not attempt to summarise the detailed advantages of liquid fuel, because they have been so very often recited and expatiated upon by various writers, who, however, have necessarily always taken the performance of the steamers of the "Shell" Co. for their text.

Great credit is due to the expert official advisers of the British Admiralty, who watched the development of liquid fuel from the inception of its use and who conducted most careful and elaborate experiments, which, resulting in the confidence of its great possibilities, has induced the British Admiralty, most wisely, in my opinion, to start a School of Instruction in the use of liquid fuel, and to undertake the erection of large storages in many of the home ports.

It is not the least of the advantages of petroleum as fuel that it can be stored in very large quantities, so that supplies for emergencies always exist, without the slightest fear or danger of the quality deteriorating, and I hope that finality has not been reached by the Admiralty in storing liquid fuel in home ports, where, after all, supplies of Cardiff coal can always be obtained, but that they will much more seriously study the necessity of providing supplies of liquid fuel at all their stations east of the Suez Canal, where coal cannot be stored without the most serious consequences to its calorific value. Oil, to-day, can be obtained in practically unlimited quantities, stored against contingencies, and be available with all its pristine value.

Great stress has been laid upon the fact that, so far, no large supplies of oil have been found in British territory. This is only partially true, because there exist supplies of oil in Burmah far better adapted for the manufacture of liquid fuel than for the production of an illuminant, and had it not been for the mistaken policy of the Indian Government in giving a large bounty for the production of kerosene, thus discouraging the use of oil as fuel, we should certainly have seen a large production from that field, and it could always be utilised in case of emergency and the outbreak of war preventing the procuring of supplies from other sources, but except the sentimental ground that the largest supplies available, namely in Borneo, are under Dutch jurisdiction, it is a fact that they are most absolutely within the control of British capitalists, and seeing that a state of war did not prevent the shipment of coal to both Russia and Japan during the recent hostilities, there would appear no reason why the Dutch Government should prohibit the shipment of oil for fuel by merchant vessels, even during hostilities. There is still less apprehension that the United States would take such a course, and hence I hope such fictitious grounds for the avoidance of liquid fuel, seeing its undoubted and enormous advantages to vessels of war, will not prevail, and that our Admiralty will take care to provide every torpedo boat and destroyer now building with means for burning liquid fuel.

. . The Future of the Boryslaw Oil Field. .

The question of the durability of the producing capacity of the Boryslaw oil field has lately been widely discussed and has given rise to many divergent views. Whilst some declare that Boryslaw is played out, others predict for it many decades of undiminished productivity. Our German contemporary *Petroleum*, which is exceptionally well informed on Galician topics, in its latest issue, treats this subject exhaustively from the point of view of the boring operations carried out there, the conditions of which, leaving out of account the geological considerations, are considered sufficient to explain the falling-off in production which has taken place in the Boryslaw field during recent times.

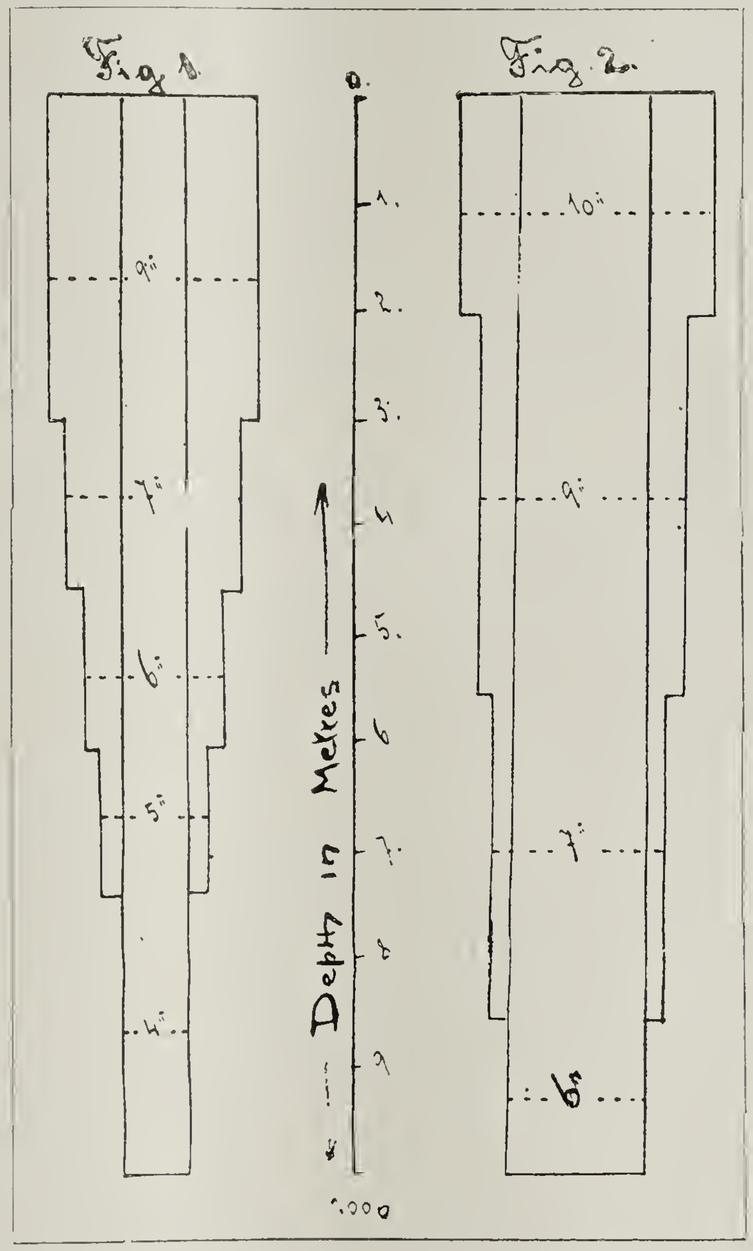
Of the 350 borings which are in existence at Boryslaw, only 25 per cent. are productive, while among the unproductive wells are some which for two, three, and in many cases even for four years, have been classed as being in course of sinking. Under the present conditions of boring science, it is inconceivable that wells should take so long in drilling, and we must therefore conclude that the majority of these incomplete wells are definite failures.

A careful consideration of various stages of development through which the Boryslaw field has passed, leads our contemporary to the further conclusion that the failure of these 263 wells is largely due to technical shortcomings in the drilling.

These wells were originally designed for much smaller depths than it has now been found necessary to go to, and consequently their casing was started at too small a diameter. When boring operations began to be developed at Boryslaw on a large scale in 1899, the engineers had little data to guide them. They knew that oil could be struck only at great depths, and they saw that, for instance, the Belgian obtained oil only at a depth of over 500 metres, the Karpathen Co. likewise had to go beyond 600 metres, while on the Sroczynski-Mecinski property, the oil was only found at 750 metres. People therefore concluded that in starting wells they had to be designed so as to strike oil with a 5-inch diameter at a depth from 700 to 750 metres. In some wells at this depth a production of 20 to 30 tons per day was obtained, which at the high prices of crude oil which were then ruling was considered as very unsatisfactory. This was the state of affairs at the time when everyone interested in petroleum in Galicia began to flock to Boryslaw. One after the other the old oil regions became depopulated, and capitalists began to be interested in Boryslaw to a continuously increasing extent; boring contractors followed, and work began at a feverish rate in every direction. Then was the golden time for the middlemen. The calculation of profits was very simple. A plot was leased sufficient for sinking two, three, or four wells. The intermediary was satisfied with a royalty of one or two per cent. of the gross output. A derrick was erected, the plot was duly christened, shares disposed of, and the boring commenced on a contract basis. At a depth of 700 or at the most 750 metres, the oil was expected to be struck when the business would be done. Apart from the favourable market prices, which in 1900 amounted to 60-70 kronen, and in 1901 to 40-50 kronen per ton, another advantage which was enjoyed at Boryslaw was that up to that time, nearly all the wells drilled there were self-flowing, and consequently did not require any complicated pumping installations and miles of electric power conduits.

Soon, however, an event took place which was quite unexpected.

On June 26th, 1902, the well No. 1 of Messrs. Mikucki and Perutz on the Potok Road struck an oil deposit at a depth of 807 metres. The rate of production was at first impossible to determine, but later on it settled for a long time at 400 tons per day.



Only after several weeks the owners managed to arrange the collection of the oil from this well about 350 tons per day. It may be mentioned, by the way, that at a depth of 760 metres this well had a yield of about 30 tons per day, which kept on for a long time, and only after this yield began to diminish, the owners decided to deepen the well by at least 50 metres. On reaching the 47th metre an eruption took place, the like of which was never heard of in Galicia.

This success changed all the views as to the depth at which the oil-producing stratum was reached, and everyone now recognised that it is not the first oil horizon, but the second one which has to be tapped, no matter to what depth the well has to be sunk.

Boring activity, and consequently the production, began to increase at a rapid pace, whilst the market prices of crude simultaneously began to decline. People did not know what they should do with the great quantities of oil, and so at the end of 1902 the Boryslaw oil was quoted at 14 kronen per ton.

On the 1st September, 1903, the Petrolea Co. was formed, in which all the producers were combined, and which resulted in the steadying of the price at about 30 kronen per ton. The good old times when prices were 60 to 70 kronen were gone for ever, and it will therefore be understood that the producer, who, at the time of high prices was satisfied with his production of 20 to 30 tons, and did not feel any desire to drill deeper, was now compelled to search for the more prolific oil stratum, as it was only by the very prolific production that he could make any profits out of the low prices which he could realise.

This prolific oil stratum, however, could not always be obtained at a depth of 50 metres below the first oil horizon. In most cases the wells had to be drilled from 100 to 180 metres deeper, and as but few wells were laid down in a manner which would make it possible to sink them to such great depths, the dimensions of the well had to be altered ; 5 inch and 4 inch columns of casing had to be withdrawn in order to make further drilling possible. Such reconstruction of wells in many cases took years to accomplish.

At that time widely divergent views were entertained as to the depth of this second oil horizon, and it is to these divergent views that we must ascribe the fact that some boreholes drilled in 1902, and even as late as 1903, were not provided with rational arrangements of the casing for the successful completion of the wells.

Only during the last two years it was realised that in the Boryslaw district wells have to be drilled to varying depths in order to reach the prolific oil deposit, but in no case can any substantial success be achieved at less than 900 metres depth.

This experience had to be bought at the cost of many sacrifices in the shape of abandoned boreholes. Some wells, however, were successfully sunk to proper depths, and brought about the steady and rapid development of the Boryslaw oil field. From time to time the productivity of certain individual wells declined, when disquieting reports began to circulate, and it was whispered on all sides that Boryslaw was exhaus ed. It needs, however, only the striking of a well with a yield of 300 tons a day to revive hopes and faith in the field.

These successive strikes of oil and the generally slow progress of the old boreholes are a characteristic feature of the Boryslaw field, and are perhaps the main cause of the conflicting views which we hear.

The fact that several borings in the northern sections of Boryslaw, that is, in the northern part of Potok, and in the Debra section, have stopped working, partly through the smallness of the diameter to which they have been reduced, and partly through failure to strike oil, notwithstanding the great depth attained, enables us to fix the limits of the productive regions. Although it is not impossible that in these northern plots, held partly by the Karpathen Co., Messrs. Perkins, McIntosh, and Perkins, and partly by Mr. A. H. Synge, and some other lands which are not yet developed, may eventually through the few wells which are still working reach the prolific oil stratum.

It must not be forgotten that throughout the whole of the southern part of the Potok region some highly successful results have lately been achieved. For instance, well No. 5, on the Lubomirska plot, completed at the beginning of this year, with a daily yield of 150 tons, from a depth of 970 metres, and this induced the owners of the plot to lay down a second well.

If in the northern part of the Boryslaw field operations have, for the moment, been restricted, there has been a corresponding increase in the activity in the adjoining Tustanowice field.

The general interest which was hitherto concentrated exclusively around Boryslaw was transferred to the new field, and during the last two years a new Boryslaw arose there, in which there are now about 140 working derricks, and an output of 115 thousand tons of crude oil per month. The oil fever has now obtained a new sphere, and speculation is rife in shares and royalties on oil lands at Tustanowice. The same conditions of unsound speculation which have so heavily handicapped the industry at Boryslaw, have also made themselves apparent at Tustanowice. In other respects the development is proceeding more favourably at Tustanowice than at Boryslaw, that is in the technical execution of the boreholes.

The valuable experience obtained at Boryslaw is being successfully applied at Tustanowice, and it is thanks to this, that with a few exceptions, all the wells at Tustanowice are properly and rationally laid down and carried out. For instance, when by the experience of a neighbouring well, the owner expected to strike oil at a maximum depth of 900 metres, the boring engineer thinking of the lesson learnt at Boryslaw, wisely arranges the diameter of the well to enable it to be sunk to 1,100 metres and upwards.

The accompanying sketch shews the two methods of arranging the casing, one that was used in the old boreholes at Boryslaw, and the other the method adopted in the new wells at Boryslaw and Tustanowice. The new borings are mostly started with 10 inch diameter, a size which was never used in the old wells.

GERMAN ITEMS.

The petroleum producing industry in Alsace is now practically under the control of one firm—the Deutsche Tiefbohr Actiengesellschaft, which has just completed the purchase of the properties of the Pechelbronner Oelwerke, of Schiltigheim, and of the Gewerkschaft Gute Hoffnung. The properties of the Elsassesche Petroleum have been taken over by them some time ago.

* * * *

The Vereinigte Deutsche Petroleum Werke, of Peine, in Hanover, have earned in 1905 a net profit of 119,144 marks, which enabled them to distribute a dividend of five per cent., against a profit of 52,852 marks, and a of 4½ per cent. in 1904.

THE WORLD'S SUPPLY OF PETROL.

By Dr. P. DVORKOVITZ.

[Reprinted from "The Car."

In view of the great alarm which has been created among many motorists during the past few months as to the possibilities that the supply of petrol, or benzine, as I prefer to call it, may fail at any time, it is comforting to look at facts and figures in their matter of fact light, and see if there is any reasonable ground for such pessimistic fears.

I have devoted not an inconsiderable amount of time to the question of the supply of benzine, and I must at the outset admit that the fears of a spirit famine are for the most part based upon an entire ignorance of details, and are therefore quite erroneous. We all know that the motor-car, both for pleasure and business purposes, has come to stay, and consequently it is a question of the utmost importance that there should be no lack of supply in its fuel. The motor industry is extending at a remarkable rate, and every day the demand for motor spirit becomes greater, but I make bold to say that in spite of the views held by alarmists, the supply of petrol will always be found to more than keep pace with the demand.

As is well known, the material used for motor-car spirit represents the lightest parts of crude petroleum, and is received as a first product upon submitting crude oil to distillation for the purpose of obtaining illuminating and other oils. The product so received is known by a variety of names—petrol, spirit, benzine, etc.—but whether it is produced in America or Roumania, in Russia or Sumatra, it represents a mixture of hydrocarbons with practically similar chemical and physical properties. The benzine sold upon the English market has generally a specific gravity from 0 690 the lowest to 0·715 the highest, some being sold as imported into this country, whilst other is refined after importation.

In order to illustrate the various qualities of benzine sold upon this market I will here give the results of investigations as to vapourisation, etc., which I recently made with American spirit, Sumatra spirit, and doubly refined Sumatra spirit. They were as under:—

	American Spirit.	
	Percentage by Weight.	Specific Gravity.
Up to 50° C.	2·34	0·643
50° to 60° C.	11·88	0·655
60° to 70° C.	17·42	0·672
70° to 80° C.	15·90	0·688
80° to 90° C.	14·08	0·700
90° to 100 C.	15·92	0·712
100° to 110° C.	7·04	0·723
110° to 120° C.	6·20	0·730
Residue	6·02	0·749
Loss	3·20	—

Thus it will be seen that, although in two of the spirits their country of origin is entirely different, their boiling points and specific gravities, especially in the lower fractions, are similar, the difference being only shewn in the fractions which boil above 100 degrees C., where the American benzine fractions are lighter than those in the Sumatra spirit. The same applies to benzine of a similar specific gravity from Russia and Roumania. From experiments conducted by me a few months ago, I came to the conclusion that the chief guide in estimating the suitability of benzine for motor cars is not to be found in its specific gravity, but in the range of boiling points at which the various constituents of the benzine vapourise. Naturally the higher the percentage of fractions contained in the benzine with high boiling points, the more difficult will be the formation of the explosive gases in the cylinder. If we take this as a guide to the supply of fuel for motor car purposes, then I can immediately state that the quantity of such hydrocarbons available for that purpose is absolutely unlimited. If, however, the existing prejudices are to prevail in the minds of motorists, and in the future they still cling to a spirit with a certain specific gravity as indicative of its usefulness for their cars, then, of course, certain sources of supply will have to be excluded.

Therefore, in giving the following details of the production of crude oil in the various countries of the world I shall indicate such crude oils which are available in case the old standard of quality from the view of specific gravity is applied, and then I shall shew the sources of supply which are at the disposal of the motorist if he will only adopt as his standard the principle of judging the boiling points which are found from science and practice to be the only real standard which can be laid down.

The world's total production of crude oil last year may be taken approximately at 26,800,000 tons, but had a normal state of affairs been ruling in Russia, then the total figures would have exceeded 30,000,000 tons. Of this quantity, some 17,000,000 tons came from America, Russia coming second with her 6,500,000 tons, instead of her average 10,000,000 tons. Sumatra, Java and Borneo collectively produced 1,200,000 tons, Galicia 800,000 tons, Roumania 600,000 tons, India 465,000 tons, and the other countries about 350,000 tons.

Now taking America, the chief sources for the supply of crude oil for the manufacture of benzine are the fields of Pennsylvania, which include the territories of West Virginia; but we must also add to the chief benzine producing states the newly discovered fields of Kansas and Indian Territory. Practically two-thirds of America's production is from the Texas and Californian fields, but this oil, being of a heavy character, is unsuitable for benzine manufacturers.

Following upon America, we have the Far Eastern fields,

Sumatra.			Doubly Refined Sumatra.	
Percentage by Weight.	Specific Gravity.		Percentage by Weight.	Specific Gravity.
3·34	0·650	....	6·00	0·648
11·84	0·662	....	16·30	0·664
15·20	0·681	....	16·74	0·662
16·36	0·701	....	16·42	0·702
13·52	0·717	....	16·88	0·716
15·40	0·732	....	11·46	0·732
7·74	0·740	....	7·42	0·743
6·70	0·752	....	3·36	0·751
6.92	0·773	....	2·50	—
2·98	—	....	2·92	—

and, although the production of crude oil is proportionately small, the percentage of benzine in Sumatra oil is very high, and so we can take it that at least 25 per cent. of the total crude oil production is benzine. Roumania and Galicia between them are responsible for about 150,000 tons of benzine, but in these countries developments upon a real business-like basis have only recently commenced.

In speaking of Russia, until the present time there has only been one available source of supply, Grosny, which represents about 700,000 tons per year, and from which crude oil about 70,000 tons of benzine are obtained. Thus far, no benzine has been exported from the Baku district, where the chief production of Russian oil is centred. This has been due to the fact that the existing railway line has scarcely been sufficient for the purpose of exporting the illuminating and lubricating as well as other oils, but now the opening of the new pipe line, from Baku to the port of Batoum, will release quite a large number of oil tank waggons which have hitherto been used for the carriage of illuminating oil, and thus these will be available for transporting benzine. The crude oil of Baku consists of two classes—that from the Balackany-Ramany-Saboontchi district, or about 60 per cent. of the total yield, and that from the newly developed district of Bebe-Aibat. The oils from the former district contain only a small percentage of benzine, but those from Bebe-Aibat are rich in the benzine fractions, and from 200,000 to 300,000 tons of benzine could be exported annually. Therefore it is easy to see that even if the motorist chooses to have a benzine of a certain specific gravity, and takes no notice of the boiling points of the fractions, the world's supply is approximately 1,000,000 tons per annum, this including 300,000 tons from Pennsylvania and the Far Eastern fields respectively, 150,000 tons from Roumania and Galicia combined, and 250,000 tons from Bebe-Aibat.

But should the motorist recognise that the proper standard from which to judge the suitability of benzine is from the boiling points of the various fractions, then the supply of motor spirit can be considerably augmented. A large supply could be obtained from the fields of Borneo, and this would be found upon application to be as good as any other, while we could also add a heavy spirit from the American oils (excluding Pennsylvania) and Russian oils (excluding those from Bebe-Aibat). This additional supply which I would most conservatively place at 500,000 tons, would bring the total yield up to 1,500,000 tons per annum.

From the point of view of consumption it is very difficult to obtain accurate statistics. We do know, however, that the three great consuming countries in Europe (or I could say in the world)—Germany, France, and England—consumed between them 200,000 tons for the past twelve months, Germany taking 110,000 tons, England 60,000 tons, and France 30,000 tons, and consequently at the outside the whole of Europe only consumed during 1905 about 250,000 tons of motor spirit. Compare this with the available supply, and with what could be produced if only the motorist would carefully consider the question as to the suitability of benzines, and we see how unreasonable it is to argue or in any way suggest that we are shortly to face a famine in motor spirit.

This, I know, has mainly been brought about by the fact that quite recently the price of motor spirit has advanced, and now placed at a price which does not mean continuous loss all round, as was the case previously when it was in some instances more advantageous to burn the spirit upon the fields than go to the expense of marketing it.

If motorists really wish to obtain the spirit at a cheaper price, or to make this possible in the long run, then they would be well advised to direct their attention to fighting the absolutely unnecessary and absurd restrictions which are now placed upon the transit of the article. Famine, at all events, is out of the question.

PATENTS.

Applications for Patents and Patent Applications recently published relating to the Petroleum Industry.

Specially contributed by Messrs. EDWARD EVANS & Co., of 27, Chancery Lane, London, W.C., and 105, Colmore Row, Birmingham, Consulting Engineers, Chartered Patent Agents and Enrolled Patent Attorneys of the United States.

Applications Filed in Great Britain.

Improvements in and Relating to the Treatment of Mineral and Petroleum Oils. — Ray Macalpine and Thomas Macalpine, London.

A Process for making Fusel Oil and Components of Fusel Oil.—Felix Ehrlich, Birmingham. No. 6640 of 1905.

Improved Treatment of Vegetable and Animal Oils to Thicken or Dry them, especially for the Manufacture of Linoleum.—William Cramp, London, No. 6923 of 1905.

Applications Published in Great Britain.

Improvements in or connected with Lamps for Burning Oil or Spirit.—George Bentote, Acton, Middlesex. No. 26107 of 1904. (See special description on page 271).

Improvements in or Connected with Evaporating Apparatus.—John Hindley Walker, Liverpool (George R. Ray, Manistee, Michigan, U.S.A.). No. 8690 of 1905.

This invention relates to evaporating apparatus of the "vacuum" type. The object of this invention is to increase the circulation of brine through the vertical tubes or flues of the heating belt, and this is effected by means of a propeller. This propeller is disposed at the lower part of the so-called "down flow" tube of the heating belt, so that by this action the circulation of brine down the centre and up the tubes or flues of the belt is increased. The shaft of the propeller is preferably carried at its lower part in a bearing supported by uprights within the pan, and is rotated through bevel or like gearing on the outside by a belt and pulley, or in any other suitable way.

Improvements in and Relating to Deep Boring Tools.—Ferdinand Dietzsch, London, and Henry Charles Jenkins, London. No. 9595 of 1905.

This relates to a hollow and sampling tool having an iris diaphragm adapted to be held open while the tool is being forced into the material of which a sample is required, so that a sample shall pass into the tool and be closed by the initial withdrawal operations on the tool, so that the sample shall be retained within the tool.

Improvements in and Relating to Means for Ascertaining the Depth from the Surface of Water in Wells, Borings and similar purposes.—No. 4986 of 1905.

This relates to means for ascertaining the depth from the surface of water in wells, shafts and borings, and the depth of the water therein, consisting of a plummet or contact device, a graduated conductor connected thereto, a battery connected with the said conductor, and an indicator or galvanometer connected in the circuit of the battery and contact device.

AMERICAN PATENT GRANTED.

Device for Removing Rings from Wells.—William J. Wagner, East Bradford, Pa.

A device comprising oppositely-disposed members secured together, each member having an opening in its lower end, the said openings being disposed opposite to each other, a dog pivotally mounted in each member and provided with a hooked end for operation through the corresponding openings of the said members, and springs arranged contacting with each member to hold the hooked end thereof normally outwardly through the corresponding opening.

IMPROVEMENTS IN OIL BURNING LAMPS.

Details of an invention by George Bentote, of 17, Shaa Road, Acton, Lamp Works manager, are now published, a patent having been granted. The invention relates to improvements in or connected with lamps for burning oil or spirit and the primary object thereof is to provide a lamp adapted to fit into the tube or socket of an ordinary carriage lamp or lantern similarly to a candle and to burn benzoline in such manner that a flame capable of regulation and of considerable illuminating power is obtained without the employment of a chimney and without the necessity for attention after first lighting.

In order that the invention may be more clearly understood and readily carried into effect the accompanying drawings are reproduced which fully describe the same.

Figure 1 is a sectional side view of a carriage lamp or lantern fitted with a benzoline lamp according to the present invention.

Figure 2 is a side elevation of the lamp separately.

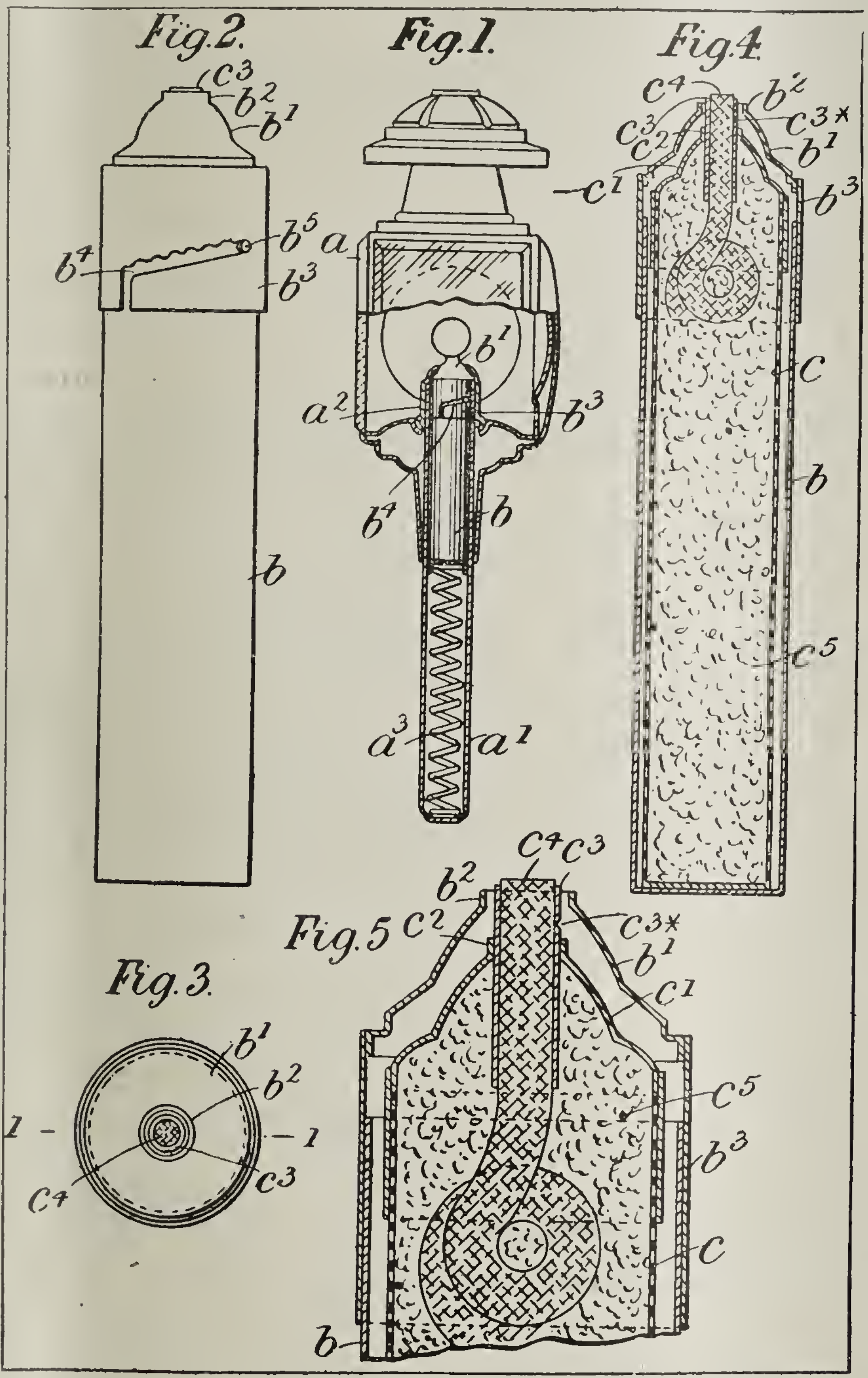
Figure 3 is a plan thereof.

Figure 4 is a vertical section taken on the line 1—1 of Figure 3.

Referring to the various figures *a* represents an ordinary carriage lamp or lantern which is constructed with the usual candle tube or socket a^1, cap or cone a^2 fastened by the usual bayonet catch and internal spring a^3.

b represents a tubular reservoir which is closed at the bottom but open at the top and of similar diameter and length to an ordinary carriage candle so that it is adapted to fit into the tube or socket a^1 of an ordinary carriage lamp *a* and this reservoir is designed to be partially filled with benzoline.

Loosely fitting the reservoir *b* and co-extensive in length therewith is a perforate tube, cylinder or chamber *c* closed at its lower end and adapted to be filled with cotton wool c^5, cotton waste, sponge or other suitable material preferably of a springy or spongy nature which takes up the free benzoline within the reservoir *b*.



The perforate tube or chamber *c* is at its top end closed by a cap c^1 having a conical top axially perforated and formed with a flange c^2 around the perforation constituting a short tubular fitting in which is mounted with capability of sliding for adjustment of the wick, a wick tube c^3 fitted with an asbestos or other suitable incombustible wick c^4 of such a length that it extends into the body of the saturated absorbent material c^5 or it might also lie upon the surface thereof.

The top end of the reservoir *b* is closed by a cap consisting of a cylindrical part b^3 having a conical top b^1 shaped somewhat like the top end of an unburned candle and axially perforated and formed with a shallow flange b^2 similarly to the cap c^1 of the perforate chamber *c* but in this case the perforation is of considerably larger diameter than the wick tube c^3 so as to leave an annular space between the flange b^2 of the cone b^1 and the wick tube c^3.

In order that the height of the flange b^2 of the cone b^1 with relation to the wick tube c^3 may be regulated, the reservoir *b* is provided with a laterally projecting pin or stud b^5, and the cylindrical part b^3 of the cap of the reservoir *b* is formed with a co-acting circumferential and inclined or spirally disposed slot b^4 terminating in a vertical opening after the manner of a bayonet fastening so that by turning the cap b^3 in one or the other direction the height of the cone b^1 and its flange b^2 may be adjusted within certain limits, and the height of the flame correspondingly regulated, and in order to prevent the accidental shifting of the cone due to vibration or other cause, the metal bordering the top edge of the slot b^4 is provided with a series of notches or indentations which engage the pin b^5.

If desired, any other suitable means than the slot b^4 and pin b^5 may be employed for regulating the burner cone b^1.

The operation of the lamp may be described as follows:—

The perforate chamber *c* is removed from the reservoir *b* by taking off the cap b^3 and the reservoir is filled to a suitable extent with benzoline, the perforate chamber is then introduced into the reservoir *b*, when the material c^5 absorbs the free benzoline; the benzoline is lighted at the wick, c^4 which projects slightly above the wick tube c^3 and the height of the wick is regulated by more or less elevating or depressing the sliding wick tube c^3 by the aid of the notch c^3 the cap b^3 of the reservoir is then replaced in position and the cone b^1 is suitably adjusted with relation to the wick tube c^3.

The cone b^1 has the effect of spreading the flame, whilst a small volume of gas or vapour finds its way between the perforate chamber *c* and the reservoir *b*, and between the flange b^2 of the cone b^1 and the wick tube c^3, thereby to some extent feeding and augmenting the flame, the volume of which may be regulated in the desired manner by means of the adjustable cone b^1.

The lamp is then bodily introduced into the tube or socket a^1 of the lantern *a* against the force of the spring a^3 after the manner of a candle and secured by the cap a^2.

The cost of burning a lamp of this character is extremely low compared with that of candles, the illuminating power of the flame is greater than that of a candle of equal size whilst by reason of the indestructible nature of the wick the trimming of the lamp is of a most simple character, the charging of the reservoir being all that is required, so that in this respect also it compares favourably with a candle lamp.

It will be obvious that the invention is not necessarily confined to carriage lamps, but may also be applied to other kinds of lamps employed for various purposes and to dwarf lamps or night lights.

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	11/16-13/16
Baku Russian Petroleum ..	£750,000 Ord.	£1	4/3-4/9
,, ,, ..	£650,000 5½% Pref.	£1	8/0-8/9
Bibi-Eybat Petroleum Co. ..			10/0-11/0
Californian Oilfields	£250,000 Ord.	£1	6¼-6½c.D.
European Petroleum.. ..	£550,000 Pref.	£1	3/0-4/0
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	82-85
Russian Pet. & Liquid Fuel ..	£500,000 6½% Pref.	£1	12/6-13/6
,, ,, ...	£600,000 Ord.	£1	11/6-12/6
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	3⅝-3⅞
,, ,, ...	£575,000 Ord.	£1	9/0-10/0
Shell Transport & Trading ..	£2,000,000	£1	27/6-28/6
,, ,, ,, ..	£1,000,000 Pref.	£10	9¼-9½
Spies Petroleum Company ..	£312,500	10s.	7/9-8/3

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on April 8th. Lowest Roubles.	Quotations on April 8th. Highest Roubles.
Baku Naphtha Co.	100	563	566
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	3,850	3,900
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	168	170
Neft Co.	250	—	—
Nobel Bros.	5,000	9,050	9,150
,, ,, ...	250	445	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

SCOTCH COMPANIES.

Supplied by Messrs. Maclean and Henderson, Stirling.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. 8½ pd	£199,750	£10	18
Do. 6% Cum. Pref. ..	£100,000	£10	12½
Burmah Oil, Ord.	£1,100,000	£1	58s. 0d.
Do. Pref.	£250 000	£1	26s. 0d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	8⅜
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	18¾
Do. New (£8 10s. pd.)	£131,750	£10	17
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	90s. 0d.
Do. 6% Cum. Pref.	£100,000	£10	12⅞
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	29s. 6d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	69s. 3d.
Do. "B" Deb...	£150,000	£100	152½

DUTCH COMPANIES.

Company.	Quotations March 28th.	Quotations April 4th.	Florins.
Arnhemsche Petroleum Mij. ..	80	80	1,000
Aurora ,, ,, (Deb. 5%)	90¾	90¾	—
Campina Poiana Mij...	35	35	—
Dordtsche Petroleum Mij. (Pref.) ..	124	122	500
,, ,, ,, (Deb. 4½%)	102¾	102¾	1,000
Elzasser Petroleum Mij.	2 1/16	2¼	1,000
Gaboes ,, ,, ...	19¾	19¾	—
Holl. Rumeensche Petroleum Mij...	26	26-28½	1,000
Int. Rum. Pet. Mij.	88	88¾	500
Java Petroleum Mij. (Ord.) ..	30	30	1,000
,, ,, ,, (Pref.) ..	43⅞	42¾	—
Koninklyke Nederl. Pet. Mij. Shares	457–461	480–487	250-1,000
,, ,, Share certificates	461–467	478–482	1,000
Mœara Enim Petroleum Mij. ..	112¼–112¾	114½–115	100
,, ,, 1-1,000 Oblig. 5	102	102	250-1,000
"Moesi Ilir" Petroleum Mij. ..	35	34⅞	—
Nederl.-Rumeensche Petroleum Mij.	16	17½	—
Nieuwe Ned. Petroleum Mij. And...	55¼	55¼	1,000
Oliebronnen in Hannover Mij. ..	170–172	170	—
,, ,, (Deb. 5 %)	100½	100½	—
Panolan Maatschappij Cert. ..	340	340	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	144–147	143⅞	1,000
,, ,, (Common) ..	100–104	97 x.d.	—
Sumatra-Palembang Petroleum Mij	60¾	61	500
Zuid Perlak Petrol. Mij. (Pref.) ..	78–86	84½	—

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 11th April, 1906, as follows:—

In the face of the further considerable advance in the price of tin and the probability of its reaching a still higher level, tin plate manufacturers are withdrawing their quotations, and buyers of oil sizes are now offering orders at increased limits. For early delivery we make prices as at foot, whilst for forward, makers ask about 3d. per box more. We give below particulars of shipments of tin and black plates in March and in the past three months:—

IC	18¾×14	124 sheets	110 lbs.	12/6 per box.
IC	19¼×14	120 ,,	110 ,,	12/6 ,,
IC	20 ×10	225 ,,	156 ,,	17/9 ,,

F.o.b. Wales. Tin lining and iron hooping extra.

SHIPMENTS OF TIN PLATES AND BLACK PLATES.

Tinned Plates and Tinned Sheets.

	Month ended 31st Mar. 1904. Tons.	1905. Tons.	1906. Tons.	Three Months ended 31st Mar. 1904. Tons.	1905. Tons.	1906. Tons.
Russia ..	1,729	28	3	7,510	4,773	219
Germany ..	1,687	2,451	2,270	4,379	6,570	7,922
Netherlands ..	1,336	2,592	3,219	4,221	6,525	8,723
*Belgium ..	—	619	1,236	—	1,923	3,321
France ..	1,695	1,509	2,217	4,202	3,075	5,543
*Portugal ..	—	678	1,326	—	2,030	2,593
U.S.A. ..	6,802	6,285	3,613	15,460	19,108	10,873
B.E.Indies..	3,422	4,942	7,209	11,117	10,866	15,954
Australia ..	1,855	1,376	247	4,272	3,244	4,481
Canada ..	944	782	1,222	2,203	3,793	2,626
Other Countries	10,250	15,513	7,665	28,686	33,742	29,516
Total tons	29,720	36,775	30,227	82,050	95,659	91,771
Total Values—	£371,387	£480,078	£401,713	£1,036,023	£1,236,806	£1,203,882
Black Plates.						
Russia ..	1,917	1,817	628	5,062	5,183	3,757
Germany ..	977	680	1,650	2,637	1,524	3,901
Belgium ...	—	342	583	—	917	1,904
U.S.A. ..	—	14	1	—	72	1
Other Countries..	2,489	2,243	1,996	6,908	5,758	5,449
Total tons	5,383	5,096	4,858	14,607	13,484	15,012
Total Value—	£52,148	£49,819	£51,272	£144,574	£129,988	£151,240

* Included in "Other Countries" prior to 1905.

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32, GREAT ST. HELEN'S, E.C.

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6 ,, ,, ,, 6 ,, ,,
7 ,, ,, ,, 12 ,, ,,

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THE
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American Office: 150, Nassau Street, New York.

The ANNUAL SUBSCRIPTION for English and Foreign readers is 26s., including Postage Single Copies, 1s.

SATURDAY, APRIL 14TH, 1906.

TO MY READERS.

Now that the Petroleum Review is somewhat changing its character and size consequent upon appearing fortnightly instead of weekly as hitherto, my readers will, and not without cause, look for some explanation as to the reasons which have led me to take the present step. I have on many occasions taken my readers into my confidence and explained matters which, under other circumstances, might have been left unsaid, for I have always felt that in order to achieve success there should be the existence of a common bond of union between my subscribers and myself. Therefore, it is my duty to-day to briefly review the past history of my journal, and to suggest how it will, in its improved form, face the future.

Many of my readers there are who will recollect the time when—now over seven years ago—I published the first issue of the Petroleum Review, and thus opened up what was, without a doubt, a new era in the history of technological literature. The petroleum industry was steadily but consistently growing in importance in all parts of the world, and at that time I recognised that though in this country there was only a comparatively small circle either of traders or investors interested to any great degree in petroleum production, refining, or distribution, I felt confident that a journal upon the lines I had laid down for the Review would supply a want, and tend in no small measure to assist the industry, if only by creating more interest in it.

Nor was I disappointed, for, from the first the journal, the only one of its kind then published in England, leapt into prominence and became very popular. The contents of its pages were carefully perused by those interested in the trade both at home and abroad, and in a short time the Review became a publication, not only international in its character, but in the countries from which the general body of readers were drawn.

As years went by, my journal continued to be well received upon all hands, and, in spite of spasmodic opposition, it grew in influence, until to-day there is scarcely any firm of note engaged in the production, refining or distribution of petroleum, but which is included in my list of subscribers, for the Review, week by week, finds its way into the uttermost parts of the world. For this continuous support I am deeply grateful, for it shews to me that the journal is doing a real service to the industry. At the same time the conduct of such a paper has taken up not only a great deal of time, but has necessitated my coming forward with a substantial subsidy with monotonous regularity, for, after all, though specialism in literature is one of the good signs of the times, those who indulge in it can only hope for the co-operation of those engaged in an industry which has very limited dimensions. The Review contains, I am aware, much information of the greatest value to the oilman of to-day, but to the small trader or the man in the street, it is, and quite naturally so, of little consequence. Therefore I have had to look for my chief support from the advertisers who specially cater for the needs of the petroleum industry, and more particularly from those firms in England who supply goods for use on the oil fields.

Unfortunately, however, during the past few years many of the English firms have not received much encouragement in the way of securing orders, consequently they have not seen their way to support the Review in a manner they otherwise would have done.

The natural result has been that I have had to carry on the journal at a large financial loss, which from year to year has grown until at the present time, it has reached about £6,000. A minor portion of this necessary capital has, I am thankful to say, been supplied by my friends, who have recognised the great work which the Review has done on behalf of the trade.

My readers will, I feel sure, see that for a professional man not only to devote a great deal of his time in conducting a journal such as this, and in addition to pay for that honour at the rate of about £800 per annum is more than can be expected, and therefore it is with the greatest reluctance that I have been compelled to issue the Review fortnightly in future instead of weekly as in the past.

This will, of course, reduce the loss considerably, though as a publication, the journal will, I doubt not, not suffer in the slightest extent. The fortnightly issue will be greatly enlarged, and this increase of space will be sufficient to permit of a better arrangement of the world's petroleum news, while those shortcomings, inseparable from the publication of a technical journal every seven days of the year, will disappear, and give place to an attractive display of brightly written articles which must be appreciated. I need scarcely say that I shall continue to put forward every effort to supply my readers with the latest information upon the many matters in which they are interested, and feel certain that with more time at my disposal, the value of the contents of the fortnightly Review will be enhanced considerably. In a word, everything will be done in order that the Review may worthily continue to rank as the one representative journal in the petroleum trade of the world.

P. Dvorkovitz.

LONDON OIL SHARE MARKET.

Tuesday, April 10th.

We are pleased to report a much better tendency in the Oil Share group of the London Stock Exchange, consequent on some little demand for the various issues.

The reduction in the bank rate on Thursday last to $3\frac{1}{2}$ per cent. from 4 per cent. did not have any immediate effect upon stocks and shares, the Natal difficulties retarding business at the onset, and the close proximity of the Easter vacation afterwards curtailing fresh commitments; but it is generally anticipated that dealing may now be expected to broaden out, and the industrial section receive a good deal of the attention of the public.

For a *resumé* since we last wrote we give Saturday (March 31st) figures in full, when Anglo-Russians stood 0 to $\frac{1}{16}$, Assam Oil $\frac{5}{8}$-$\frac{7}{8}$, Preference 6s. 9d. to 7s. 3d., Bibi-Eybats $\frac{7}{16}$-$\frac{9}{16}$, Debentures 88-93, Californian Oilfields $6\frac{3}{8}$-$6\frac{5}{8}$, Refineries $\frac{3}{8}$-$\frac{1}{2}$, European Preference $\frac{1}{8}$-$\frac{1}{4}$, Debentures 81-86, Russian Ordinary 10s. 6d. to 11s. 6d., Preference 11s. to 12s., Debentures 87-90, Schibaieff Ordinary 8s. 6d. to 9s. 6d., Preference $3\frac{3}{8}$-$3\frac{5}{8}$, Shell Transport Ordinary 23s. 6d. to 24s. 6d., Preference 9-$9\frac{1}{2}$, and Spies $\frac{11}{32}$-$\frac{13}{32}$.

During the next few days a good deal of quiet business was transacted, and prices gradually crept up, till Baku Ordinary stood at 3s. 6d. to 4s., Preference 7s. 9d. to 8s. 3d., Anglo-Russians $\frac{1}{16}$-$\frac{1}{8}$, Russian Ordinary 11s. to 12s., and Spies $\frac{13}{32}$-$\frac{15}{32}$, Californian Oilfields were, on the other hand, somewhat lower at $6\frac{1}{4}$-$6\frac{1}{2}$.

This week, however, business has been much more brisk, and Baku Ordinary has advanced to 4s. 3d. to 4s. 9d., Preference 8s. 6d. to 9s., Russian Ordinary 12s. to 13s., Schibaieff Ordinary 9s. 6d. to 10s. 6d., Preference $3\frac{5}{8}$-$3\frac{7}{8}$, and Shell Transport Ordinary 27s. 9d. to 28s. 3d.

The fornightly carry-over took place on Monday, when the account to be adjusted was exceedingly light, and the rate of interest charged for the continuation of Oil Shares to the end-April settlement was 5 per cent. to 7 per cent.

A comparison of making-up prices from those fixed for the end-March settlement discloses a welcome list of advances, The only exception being Californian Oilfields, which have lost $\frac{1}{8}$ at $6\frac{3}{8}$. Anglo-Russians have improved 9d. per share at 2s., Baku Ordinary 1s. 3d. at 4s. 6d., Preference 1s. 6d. at 8s. 6d., Russian Ordinary $\frac{1}{16}$ at $\frac{5}{8}$, Preference 3d. at $\frac{5}{8}$, Shell Transport and Trading Co., $\frac{1}{4}$ at $1\frac{7}{16}$, and Spies 1s. at 8s. 6d.

THE BAKU PETROLEUM INDUSTRY IN 1905.

THE EFFECT OF THE RIOTS.—A BRIEF SUMMARY.

The complete statistics of the production of crude oil at the Baku oil fields, published by the Baku Petroleum Association, enable us to shew figures of the condition of the Russian producing industry before and after the riots.

These figures are as under :—

	July.	August.	September.
Production of crude oil in million poods	47·4	32·3	2·1
Number of producing wells ..	1,556	1,557	141
,, ,, inactive wells ..	1,255	1,291	3,393
Amount of drilling done in feet	33,131	18,151	483
	October.	November.	December.
Production of crude oil in million poods	18·4	24·5	19·9
Number of producing wells ..	539	764	862
,, ,, inactive wells ..	2,861	2,566	—
Amount of drilling done in feet	6,020	13,664	10,192

The September figures shew the results of the riots and fires in the sharp fall in production and the going over of the majority of the productive wells to the category of the inactive ones. After that, begins the gradual restoration of the oil field activity.

The figures of the crude oil production at the Baku oil fields month by month for the last three years are given below (in million poods):—

	1903.	1904.	1905.
January	51·5	45·7	45·1
February	45·0	45·9	42·5
March..	49·5	51·5	49 8
April	48·3	52·7	47·2
May	59·1	56·3	39·2
June	58·9	54·8	46·3
July	36·8	55·3	47·4
August..	51·3	54·9	32·3
September	48·8	54·0	2·1
October	49·9	58·8	18·4
November	49·6	60·9	24·5
December	46·9	23·8	19·9
Total	596·6	614·6	414·7
Including production by spouters..	53·4	36·2	14·7

The above figures shew that the production at the oil fields, with but slight exceptions has been proceeding uniformly, and only the events of last August, which resulted in the destruction of many of the productive wells, disturbed the state of affairs.

The first labour strike occurred in July, 1903, but it was promptly terminated, and has had no influence on the subsequent course of operations at the oil fields. During the whole of 1904 the production was proceeding normally, and toward the end of the year, and especially in November, it rose to the high level of 60·9 million poods. Then it suddenly fell to 23·8 million poods, as in the second half of December the fields were idle owing to another strike of workmen. The most unfavourable conditions prevailed in the past year. At the beginning the output began to recover, but in May fresh misunderstandings with the men arose, and in August numbers of the wells were destroyed by fire, and compared to 1904 the output shewed a decline of 200 million poods. As a result of this a marked change occurred in the tone of the markets and in the condition of the trade in petroleum products.

BAKU PRODUCTION BY FIRMS IN 1905.

OFFICIAL FIGURES.

We are now in possession of the complete official statistics of the production of crude oil by the various firms operating at Baku in 1905. These figures differ in some instances from those published in the Review last week, but, as was then pointed out, those were merely approximate. The total number of firms at the Baku oil fields in 1905 was 141, and the total production of all these firms was 410,313,147 poods. The following firms have had a production of over a million poods:—

	1905. Poods.	1904. Poods.
Adamoff, A. I.	1,727,629	3,670,300
Apscheron Co.	1,710,500	2,845,600
Aramazd Co.	9,108,494	16,733,200
Assadulaeff	7,856,773	8,549,182
Baku Naphtha Co.	23,937,109	26,297,386
Baku Naphtha and Trading Co. ..	9,841,000	1,320,180
Baku Russian Petroleum Co., Ltd.	15,264,773	26,027,372
Balakhany Naphtha Co.	1,434,751	2,416,537
Benkendorf and Co.	4,990,205	6,502,103
Bibi-Eybat Petroleum Co., Ltd. ..	1,848,300	12,002,500
Caucasian Naphtha Co.	2,659,263	3,800,440
Caspian Society	20,142,643	34,487,947
Caspian and Black Sea Society ..	26,415,533	53,358,170
European Petroleum Co., Ltd. ..	7,000,330	11,932,240
Gagen, T. and E.	1,308,403	1,509,789
Kavkaz Co.	2,761,667	4,119,541
Kalantaroff and Co.	6,582,000	9,208,000
"Kama" Co. (Metrofanoff) ..	1,787,668	2,375,154
Krassilnikoff Bros.	1,587,620	2,519,636
Kolesnikoff Bros.	1,339,028	1,653,762
Mantascheff and Co.	26,220,191	49,256,433
Maryinskoe Co.	1,521,209	893,813
Melikoff and Co.	1,376,173	2,139,967
Moscow-Caucasian Co.	24,856,676	20,033,054
Miloff Bros.	1,162,152	1,911,020
Miloff and Tairoff	2,422,078	3,632,100
Mirzoeff Bros.	10,177,743	16,272,928
Nabatoff Bros. and Co.	1,153,900	753,940
Nagieff, M.	12,328,317	11,178,760
Naftalan Co.	7,307,637	11,450,866
Neft Co, (late Tumaeff)	4,888,213	9,329,984
Nobel Bros.	47,585,520	74,892,321
Ogulevitch, B. A.	2,380,400	9,102,853
Pitoeff and Co.	10,491,695	10,479,320
Polak and Sons	3,079,130	227,065
Russian Bebe-Aibat Co.	3,886,770	5,563,445
Russian Naphtha Co.	11,802,035	12,415,972
Russian Petroleum and Liquid Fuel Co., Ltd.	13,022 539	28,652,058
Sarukhanoff	1,013,084	1,560,584
Soutchastniki Co.	1,915,256	3,525,500
Schibaieff Petroleum Co., Ltd. ..	10,333,249	14,917,890
Shikhovo Co.	4,323,939	3,150,692
Ter Akopoff Co.	4,543,120	8,758,082
Tiflis Co. (Bebe-Aibat)	5,593,150	5,005,126
Vorontzoff-Dashkoff	2,421,700	2,514,458
Zoubaloff	14,386,000	22,340,000

Tarakhan Petroleum Co.—At the annual meeting of shareholders of this company held at Amsterdam the directors' report stated that the company's property at Tarakhan is being energetically developed by the Royal Dutch Co. It was further announced that, according to reports just received, one of the wells has resumed flowing, and that a storage installation of a capacity of 4,000 tons has been provided to receive the oil. The report was adopted.

The Holland Perlak Petroleum Co.—At the annual meeting of shareholders held at Amsterdam a few days ago the direcrors' report and accounts for the past year were approved. Mr. P. Kolff, the retiring director, was re-elected on the board.

THE ADVANTAGE OF THE USE OF ELECTRICITY AT OIL WELLS.

A PLEA FOR AMERICA TO FOLLOW EUROPE.

Mr. George E. Walsh, writing in the current issue of *Mines and Minerals*, urges the adoption of electricity at the American oil fields in place of the present steam engines, and points out at length the many advantages which electricity have, especially for oil field work. One important fact which has been attracting attention of late, says the writer, is the use of electric power for oil wells in several European countries, as a direct result of the danger caused by using steam engines.

America's petroleum fields, says Mr. Walsh, have been the most prolific and most profitable of any of the natural resources of the country, and the discovery of new regions where oil exists in abundance has tended to discourage those who have predicted that the supply would soon give out. But the waste of oil has taken place on as great a scale as the supply. The crude methods of mining and storing it in the past were responsible for the waste of millions of barrels. Industrial conditions have changed a good deal so that the oil is piped to distant markets to-day at a minimum of loss; but the waste through explosions and fires is something tremendous. No one has been able to figure up the losses sustained in this way. Hundreds of millions of barrels of oil have been carried up in smoke and flame, and each year fortunes are lost in this way. When a great "gusher" catches fire it requires all the skill and ingenuity of modern science to extinguish the flames. In many cases it is impossible to put the fire out, and the well is allowed to burn until the pressure is reduced so that ordinary dynamiting can control the fire.

Ninety per cent. of the oil-well fires are started by the drill, or the pumps operated by steam engines. When the point of the drill crushes through the substratum of hard rock which holds the oil in its subterranean reservoirs, the pressure from below sends the liquid up in great geysers which spray around in all directions. Any fire within a distance of 50 feet is apt to cause ignition, and the great spout of oil once fired becomes a most destructive agent.

The use of electricity in the oil regions of America has grown very slowly, and comparatively few drills and pumps are thus operated. Notwithstanding this the danger from fire causes insurance rates to stand at almost prohibitive rates, and in some instances no insurance whatever can be obtained on the property or the machinery. In California, Texas, Kansas, Indian Territory, and Oklahoma hundreds of thousands of dollars annually go up in burning oil wells, which, while presenting a very spectacular sight, is hardly consistent with modern methods of industrial progress and economy.

The use of electric motors for driving oil drills and oil-well pumps has extended rapidly in parts of Europe where German and French engineers have studied the problem. To a European engineer the waste of Americans seems often nothing less than a crime.

The suppression of the fire risks in the oil regions first led engineers in Russia, continues Mr. Walsh, to experiment with electric motors. The fires and explosions at the mouth of the wells were almost as great in that country as in America. The elimination of the fire risk in the oil regions was not the only consideration however, which induced the engineers to adopt electric power. The wells in nearly every field are scattered over a wide area, necessitating the distribution of steam pipes over a great radius or the installation of separate generating units. This was a costly method of operating. In some cases the cost of power was so great as to make profitable oil mining impossible except in regions where the flow was abundant. For each paying well a dozen would be operated at a loss.

Another important point which has made electric oil drilling and pumping profitable in Europe has been the great variation in the load. One drill would work smoothly through soft earth and rock, and another would meet with great obstacles and require more than double the amount of energy. Likewise, after the wells became nearly exhausted the installation of oil pumps shewed the same variation. The use of pumps for driving the oil to storage tanks and reservoirs has given an unusual amount of change of load.

After dealing with the use of electricity in the Roumanian and other European fields, the writer concludes by remarking that the advantages obtained in regulating the oil production in Europe by means of electrical generating stations for extensive fields are promising in America. Fires in the oil fields are fully as numerous and destructive as in Russia, and the waste of energy by using individual steam units for each well is a factor of no small importance. Where steam pipes are used for carrying steam to distant wells, the loss through condensation is considerable, and its remedy is more easy to suggest than in coal mines. The adoption of electricity for different kinds of mining operations is one of the interesting questions of the day, but if there is one field that should shew especial benefit from this it is in mining for oil. And this particular field has shewn the least responsive appreciation of the opportunities offered by the central station idea from which electric power can be run on overhead wires to hundreds of different wells.

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The "Syren and Shipping," Illustrated.—The five-hundredth issue of *Syren and Shipping*, which is now on sale, forms a worthy memento of the progress which has been made in the shipping trades since the first issue of that now popular journal left the press. In its one hundred pages of most interesting text matter are gathered together articles upon every phase of the great industry which the journal so faithfully serves, and we feel confident that never has such a mine of information been served to the shipping trades as Mr. Carozzi has now succeeded in placing before his readers. The issue is admirably illustrated, and the numerous signed articles by some of our most prominent men of commerce are bound to be keenly appreciated even by those who take but a cursory interest in the great industry.

MISCELLANEA.

THE FLASH-POINT FALLACY.

CITY TRADE MEETING ABANDONED.

Owing to the withdrawal of Mr. Benn's bill to amend the existing Petroleum Acts, the meeting of the members of the oil trade of London called to protest against the measure, and which was to have been held last Tuesday at the Baltic, was abandoned.

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PETROLEUM IMPORTS INTO GERMANY.

The following table gives the total imports of petroleum products into Germany during the first two months of 1906:—

	Tons.
Crude Oil	21
Refined Illuminating Oil	289,361
Petroleum Distillate, including Crude Benzine, etc.	1,782
Lubricating Oils	18,755
Mineral Oils, for purposes other than illumination, lubrication, or gas making	652
Mineral Oils for refining purposes	19,655
Total	330,226

The exports of petroleum oils from Germany during the same period were:—Illuminating oil, 201 tons; distillate, 1,582 tons; lubricating oils, 621 tons; total, 2,404 tons.

The imports from the different countries were as under:—

	Illuminating Oil.	Other Oils.
United States	220,618	14,591
Russia	50,892	6,728
Austria-Hungary	16,580	1,596
Roumania	270	2,795
Dutch India	—	12,436
,, *via* port of Hamburg	894	1,252
Belgium	—	332

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BAKU AVERAGE PRICES.

The average prices of petroleum products at Baku in February, according to the official records of the Baku Exchange Committee, were as follows:—

	Copecs per pood.
Light crude at Balakhany	25·4
Heavy crude, in ships	27·7
Residuals, in ships	27·5
Kerosene, in ships	28·8

THE RUSSIAN STATE COUNCIL AND PETROLEUM INTERESTS.

We are pleased to be able to state that Mr. Paul Gukassoff, one of the chief partners of the Homelight Oil Co., has been elected to a seat upon the State Council of Russia, to represent the petroleum industry, while one of his colleagues—Mr. Krestovnikoff—also a large manufacturer in Moscow, has been elected to the same body. The petroleum industry will therefore be strongly represented in Russia's upper chamber.

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BATOUM PETROLEUM SHIPMENTS.

The shipments of petroleum products during the week ended March 18th, from Batoum were as under (in thousand poods):—

	Illuminating oil.		Other products.	
	1905.	1906.	1905.	1906.
To Europe ..	323	558	16	4
To the East ..	170	—	—	—
To Russian Ports	—	1	4	12
From Jan. 1st to Mar. 18th:—				
To Europe ..	4,138	2,202	1,111	735
To the East ..	3,373	637	81	—
To Russian Ports	844	874	4	43

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ROUMANIAN PETROLEUM EXPORTS DURING FEBRUARY.

The following were the quantities of various petroleum products exported from Roumania in February (in tons):—

Destination.	Crude, Distillate, Gas Oil, etc.	Illuminating Oil.	Benzine.	Total.
Austria-Hungary ..	949	—	55	1,004
France	413	8,009	906	9,328
Turkey	102	3,423	—	3,525
Other Countries ..	124	—	369	1,863
Total.. ..	1,588	11,432	1,330	14,350

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The "Roma" in a Heavy Storm.—The latest American mails to hand state that the oil tanker "Roma," laden with 28,437 barrels of crude oil by the Sun Pipe Line Co., experienced a heavy storm off Cape Hatteras while on a journey to Marcus Hook. It required about 300,000 gallons of oil to calm the waves. This amount, it will be remembered, was greatly exaggerated in the accounts published at the time in the English press.

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO APRIL 10th, 1906.

IN GALLONS.

[ALL RIGHTS RESERVED.]

COUNTRY.	ILLUMINATING.		LUBRICATING.		RESIDUALS.		GAS OIL. (Solar)		BENZINE.		FUEL OIL.		OTHER DESCRIPTIONS.		TOTALS.	
	Since Mar. 27.	From Jan. 1.	Since Mar. 27.	From Jan. 1.	Since Mar. 27.	From Jan 1.	Since Mar. 27.	From Jan. 1.	Since Mar. 27.	From Jan. 1.	Since Mar. 27.	From Jan. 1.	Since Mar. 27.	From Jan. 1.	Since Mar. 27.	From Jan 1.
Austria ...	—	874,560	19,740	286,050	—	11,000	—	—	—	—	—	—	—	—	19,740	1,182,610
Belgium ...	—	240	18,310	126,840	—	11,000	—	—	3,270	5,300	—	—	—	1,416	21,580	133,796
Borneo ...	—	210	—	—	—	—	—	—	—	1,849,150	—	240	—	—	—	1,849,600
Canada ...	—	—	—	8,000	—	20,000	—	—	—	—	—	—	—	—	—	28,000
Germany ...	10,500	746,120	46,870	472,210	—	—	—	—	—	2,320	—	—	250	5,230	57,620	1,236,360
Holland ...	—	180	—	920	—	—	—	—	27,500	1,042,980	259,200	357,400	2,160	14,280	288,860	1,415,280
Roumania ...	—	1,360,000	—	—	—	—	—	—	—	—	—	—	—	—	—	1,360,000
Russia ...	2,571,000	9,826,760	3,600	52,080	—	—	—	758,500	—	—	—	—	—	5,410	2,574,600	10,642,750
Sumatra, &c	—	—	—	—	—	—	—	—	46,500	976,500	—	—	—	—	46,500	976,500
U.S.A. ...	2,147 540	22,710,897	2,065,490	15,652,204	—	523,328	968,990	12,800,170	—	2,772,560	—	5,902,880	19,040	346,650	5,201,060	60,698,599
Other Countries	—	490	2,200	8,720	—	—	—	—	—	480	—	—	—	210,800	2,200	220,490
	4,729,040	35,519,457	2,156 210	16,607,024	—	565,238	968,990	13,558,670	77,270	6,649,290	259,200	6,260,520	21,450	583,986	8,212,160	79,743,985

DEVELOPMENT OF THE ROUMANIAN EXPORT TRADE.

The Steaua Romana are making special efforts to develop a petroleum export trade, *via* Giurgevo, on the Danube. The storage installation which the Steaua had at Smarda, near Giurgevo, has now been transferred to Ramadan, which is directly opposite Rous'chouk, on the opposite side of the Danube. The municipality of Giurgevo have granted to the Steaua Romana the lease of a plot of land at Ramadan to be used for the unloading of tank waggons, the storage of oil, and the manufacture and filling of cases.

It may be mentioned that during last month 30,000 cases of petroleum were sold in Roumania for Salonica at 2·10 francs per case delivered at Salonica. At present the manufacture of cases has been brought up to its maximum rate at Galatz and Constantza, in view of the practical cessation of case oil exports from Batoum. The Roumanian refiners could have exported much larger quantities of oil to the East if they were not hindered by the want of cases.

Several Roumanian petroleum companies have recently petitioned the Roumanian marine department for reduced rate for carrying petroleum oils, with a view to facilitate export operations. The newly-established Smyrna-Alexandria service of steamers in particular could, under the condition of a reduced rate, prove of great value in developing the export of petroleum in cases.

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According to reliable information to hand, the ninth conference of the Grosny Petroleum Association, which will mark the resumption of activity by the council of the association. Everything is quiet on the oil fields, and work is proceeding under normal conditions.

ROUMANIAN NOTES.

The Bustenari Company in February had a production of 10,000 tons of crude oil. Their present output is at the rate of 320 to 350 tons per day.

The Telega Oil Company in February had a production of 6,280 tons of crude oil. The output of this company is increasing, and is now from 210 to 230 tons daily.

The International Company is displaying great activity in the development of their properties at Bustenari and Gura Ocnitza. They are now drilling 10 new wells at Bustenari, and are deepening five of their wells at Gura Ocnitza. The number of the company's producing wells is eight at Bustenari and five at Gura Ocnitza.

The Vega Refinery.—The new refinery of the Vega Co. in Ploesti, which has only been working a few months, has already been the scene of an outbreak of fire. Fortunately, the damage was restricted to the destruction of two stills. The damage has already been made good, and the refinery continues to work without interruption.

The Steaua Romana Well.—The prolific well of the Steaua Romana at Baicoi has resumed flowing, and is yielding very large quantities of oil. Land in the neighbourhood of this well is being eagerly bought up by speculators, and some wells are about to be started there. A special pipe line has now been laid down connecting the well with Baicoi railway station.

The Aurora Company.—The *Moniteur du Petrole Roumain* is informed that the Aurora has now definitely broken off its relations with the Shell Co., and concluded important contracts with other firms for the sale of its oils in Europe. The Aurora Co. is also preparing to export large quantities of lubricating oils to Germany, and for the purpose is now carrying out alterations and extensions in its refinery at Tirgoveshti. Hitherto no lubricating oil was exported from Roumania.

◆

MOVEMENTS OF PETROLEUM PRODUCTS IN AMSTERDAM.

The movements of petroleum products at Amsterdam and Rotterdam in March were as follows:—

	Amsterdam.	Rotterdam.
	Barrels.	Barrels.
Stock on 1st of March	13,863	93,137
Imports in March	35,186	120,833
Deliveries in March	49,049	124,441
Stock on 31st March..	6,878	89,529

DETAILS OF BAKU PRODUCTION.

The following are the detailed figures of the production of the Baku oil fields in October, November, and December, 1905, as published in the current issue of the *Neftianoye Dielo*:—

	Number of Wells in Exploitation.	Production (in poods). By Baling.	By Spouters.	Casual.	Total.	Average per Well per Day.
October—						
Balakhany	162	1,689,758	—	—	1,689,758	491
Saboontchi	177	3,729,148	—	137,465	3,866,613	959
Ramany	95	8,134,337	—	35,336	8,169,673	4,131
Bebe-Aibat	105	4,691,028	—	—	4,691,028	2,204
Total	539	18,244,271	—	172,801	18,417,072	1,597
November—						
Balakhany..	270	2,740,991	—	—	2,740,991	393
Saboontchi	255	6,317,655	—	222,973	6,540,628	1,021
Ramany	102	4,456,764	2,466,000	20,848	6,943,612	2,632
Bebe-Aibat	137	8,281,912	—	—	8,281,912	2,287
Total	764	21,797,322	2.466,000	243,821	24,507,143	1,256

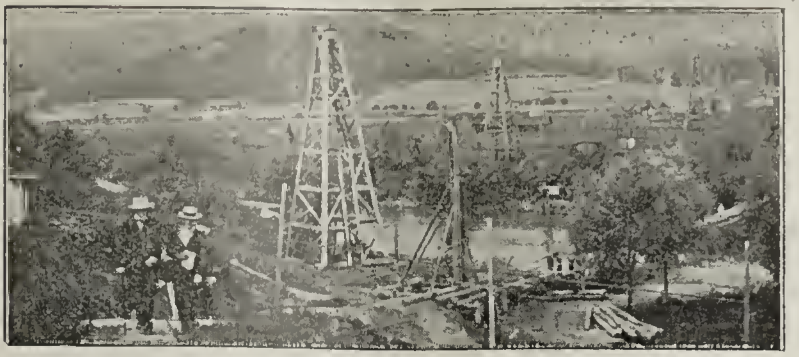
In addition to the above, there were produced at Binagadi, from 12 wells, 24,407 poods. The production by spouters was obtained exclusively by Nobel Bros. at Ramany, from the following wells:—No. 350, on plot 32, 758,100 poods; No. 400, on plot 140, 567,900 poods; No. 5, on plot 62, 1,140,000 poods.

December—						
Balakhany..	312	2,920,146	—	9,000	2,929,846	377
Saboontchi	295	6,115,622	—	182,491	6,298,120	909
Ramany	118	3,262,251	748,000	—	4,010,25	1,629
Bebe-Aibat..	151	6,698,362	15,000	3,000	6,711,362	1,971
Total	868	11,992,088	763,000	194,491	19,949,579	969

In addition to the above, there were produced at Binagadi, from 12 wells, 22,565 poods; and at Zabrat from 1 well, 1,500 poods. The production by spouters was obtained at Ramany from Nobel Bros. well No. 380, on plot 32, and at Bebe-Aibat from the Schibaieff Company's well No. 7, on plot No. 29.

OUR . . . . AMERICAN LETTER . .

From Our . . Own . . . . Correspondent.



Pittsburg, *April 2nd*, 1906.

Three weeks have elapsed since I wrote my last letter to the Review, and in the interval operations in field developments have become more interesting than has been the case for many months past. Several important discoveries have been made in the lower South-west fields, and old Butler county has come to the front with another surprise. Just at present the new Keener sand pool in Ellsworth district, Tyler county, is the stellar attraction in the lower South-west fields. Recent developments in that district have been very gratifying, and have done much to confirm the opinion that a pool of some dimensions awaits developments. The first well drilled in this territory was completed about a month ago by the Southern Oil Co., the oil producing branch of the Pittsburg Oil and Gas Co., and was something of a gusher, and when drilled into the second pay produced at the rate of 40 barrels an hour, and is still holding up at about 200 barrels a day. This test is located on the R. A. Workman farm. During the past few days the same company drilled in a second test on the same farm. The well was drilled into the first pay, and it started to flow at the rate of 20 barrels an hour. Then it was drilled a little deeper and got a second pay, and its production at once increased to 42 barrels an hour.

In the deep sand districts all of the completions came in light, and will be no incentive to increase development work. For months there has been a decline of development work in these districts, and now that the gas companies are letting up the decline will be more pronounced. For more than a year the work in the deep sand territory has been confined to the old districts, and there is no effort making to find new producing districts. Now and again a good producer has been encountered, but they are all within defined limits, and do not stimulate development work. Aside from the discovery of small pools, West Virginia no longer holds out inducements for a continuance of operations. It is also quite certain that not enough of them can be found to offset the decline in production of the old fields. That these conditions exist are recognised by experienced operators and is evidenced by the number of operators who have quite recently turned their attention to the western fields.

Amongst Pittsburg operators one hears more gossip and a great number of inquiries for the latest information from the Casey field in Illinois than the lower south-west, South-eastern Ohio or the local fields. While many are still developing their holdings in the section named, they are not taking any chances on being left out if the Illinois field should come up to expectations. With the exception of the Ohio Oil Co., it is a safe statement that Pittsburg operators hold a greater acreage in the Illinois field than all others combined.

It was reported that one company located in Pittsburg, holding leases on 35,000 acres in Crawford and Clark counties, with production in both, besides owning a valuable gas plant, has been approached by a syndicate of Chicago and St. Louis capitalists and asked to give an option on its holdings. While the option price is not given, it is understood that it runs well up into six figures. Should the deal go through it will bring new talent and capital into the business. Just at this time development work in that county is almost at a standstill on account of the bad condition of the roads. With the return of spring, it is quite certain that development work will begin in earnest, and for activity no other previous discovery will surpass it. At this time transportation facilities have been cut off on account of the railroad refusing to take any more oil until the roadbed has been put in a more substantial shape for hauling heavy trains.

Old Butler county, so long regarded as a "has been," has now got to the front again with a gusher. Within the past two months the old Banner county has made several bids for recognition. None of its new discoveries attract any attention aside from the local talent. The latest strike to stir up a commotion in that community is located on the Rose farm, in the old Hundred-foot district, near Petersville. Fifteen years ago the Hundred-foot field was the most active of any in the South-west, and had much to do with enticing operators from the Bradford field. Some very large wells were found in the district. The late William Guckert and Major Johnston drilled a well on the Humphrey farm that had a production of 200 barrels an hour. The strike, to recall attention to the old field, is located just outside the town of Connoquenessing, Petersville, and is credited with drilling itself in a few days ago, and starting to flow at the rate of 45 barrels an hour. The oil differs in colour from that found generally in the Hundred-foot formation, and for that reason the well is thought to be a freak. Be that as it may, the Butlerite is not losing any time in starting new work. New rigs are building in the vicinity, and in all 15 locations for new wells have been made.

An operator who has returned from Butler, Richland county, Ohio, reports the drilling in of another white oil producer near Butler. The well, he stated, is located on the Reed farm, and only a short distance south of the first two producers on the Mengert and Remy farms. The test on the Reed farm is owned by Butler parties, and is not nearly so good a producer as the first two. Three wells have been completed, and all produce white oil.

OIL PROSPECTS IN BRITISH COLUMBIA.

IS IT AN OIL BOOM?

Everything at present points to the fact that British Columbia is on the eve of an oil boom. The locality, which is now looked upon as a favourable place for drilling operations, takes in the most south-easterly part of the province, and also the south-western corner of Alberta. The country is mountainous, rolling, and undulating, the valley wide; on the mountain sides the formations disclose a gently folded strata, and where a break occurs, a seepage of oil can invariably be found. No less than 15 of these seepages are now known to exist where oil can be gathered, while along all the creeks numerous oil indications can be seen.

In spite of the absence of waggon roads in the region—for the nearest is almost 20 miles away—the South-east British Columbia Land and Oil Co., with the assistance of the Flathead Valley Oil Co. and the South-east Kootenay Coal and Petroleum Co., determined to prove their holdings, and the manager of the first-mentioned company was selected for the undertaking by the combined companies.

In October last year work was commenced upon the making of a waggon road, and a month later the road was completed up to a point selected for boring operations, and known as the Akamia camp. The first load of drilling machinery arrived at Akamia about the middle of December, and the construction of derricks preparatory to drilling was commenced as soon as the conditions of the weather warranted. It is expected that British Columbia will have her first producing well during the present month. The trial borings which have been put down so far shew three oil sands, the first two producing small quantities of oil, but the third, or deepest strata, proving a very satisfactory producer.

Great energy is now being displayed upon all hands, and it is a foregone conclusion that British Columbia will in a very short time be producing oil in large quantities.

CONTINUED PROGRESS IN THE MID-CONTINENT FIELDS.

For the first three weeks in March the total runs of crude oil from the American Mid-Continent oil fields averaged 52,378 barrels, and the shipments 25,108 barrels a day. For the first 14 days of the month the runs averaged 50,720 barrels, and the shipments 26,416 barrels a day. The following is the report of the Prairie Oil and Gas Co., covering the receipts and deliveries in the Kansas and Territory oil districts from March 1 to March 21 :—

	Total Barrels.	Daily Average.
Runs	1,099,942	52,378
Deliveries..	527,276	25,109
Put into tankage	572,666	27,269

The runs are the largest ever recorded. Stocks have increased at the rate of 27,270 barrels a day, which would indicate a gain for March of about 850,000 barrels. The March runs and shipments promise to exceed those of any previous month in the history of the oil developments west of the Mississippi. During the first seven days in March, the runs from the Mid-Continent oil fields averaged 50,257 and the shipments 25,232 barrels a day. The runs for February were 48,305 barrels and for January 47,490 barrels a day. Stocks on the first of the month amounted to 14,966,540 barrels, which was a gain during February of 798,048 barrels.

THE USE OF SUCTION PUMPS IN INDIANA.

Judgment has just been delivered in what is now generally known as the suction pump case. Some weeks ago we gave a few details of this interesting] case, which was instituted in the Indiana courts by the Ilo Oil Co. against the Indiana Natural Gas and Oil Co., the plaintiff company asking for a perpetual injunction against the defendant company using suction pumps to draw the gas from the territory as affecting the rights of themselves and many other operators.

The Ilo Co. claims that the defendant company, in the conducting of its business has established two large pipe lines, 10 or more inches in diameter, and maintaining pumping stations in Grant, Howard, and Jasper counties in forcing the gas from the field to Chicago, maintaining a great pressure on the pipe lines.

At the Fairmount pumping station there are three vacuum pumps of enormous capacity which, until January 1st, 1906, had been in use drawing the gas from the gas-bearing sand of both the plaintiff and defendant, that an unnatural and artificial suction has been maintained from five to 15 miles from the pumping station into the field drawn from. The plaintiff, prior to the use by the defendant of the suction pumps, was producing great quantities of oil daily and natural gas, the latter product being furnished to certain manufacturing establishments. It was contended that the use of the suction pumps had greatly reduced the quantity of oil produced.

In over-ruling the demurrer of the defendant company to the complaint of the plaintiff company, the Judge has held that the Indiana Co. had no right to take gas from the leases of other operators by the use of suction pumps, for by the use of such pumps the property of other parties was jeopardised.

It is said that the case is to be carried to the higher courts.

THE GUSHER AT SARATOGA.

In the last issue of the Review we referred upon page 247 to the gusher which had been struck by the J. M. Guffey Petroleum Co. in the Saratoga field, and which was, at the time the report was written, yielding about 12,000 barrels. The well, however, soon choked itself, and for some days was completely sanded up. When the obstruction was cleared, the production only reached 1,000 barrels per day, this figure being still kept up.

Consequent upon this interesting completion, drilling has been very brisk in Saratoga, and at the present time a number of wells are being drilled in the hope of striking new pools, and the daily output of the field now stands higher than it did a month ago.

AMERICAN NOTES

Blow-out at Jennings.—A well belonging to the Jennings-Heywood Oil Syndicate at Jennings, and located a few feet from the famous Crowley No. 1 well, came in on March 16th and shewed for a production of 10,000 barrels daily.

Will have Oil-Burning Locomotives.—It is stated that oil-burning locomotives have been insisted upon by the United States division of forestry as a condition for a right of way for the Western Pacific Railway through the Plumas forest reservation in California.

Quick Drilling.—One of the quickest bits of drilling on record in Texas is now reported from the Powell field, east of Corsicana. Here a well was started and completed in 36 hours, and is now a producer. The depth drilled was 750 feet, a rotary rig being used.

Large Fuel Contract.—An agreement has been entered into, says the *Californian*, by the Associated Oil Co., of California, for a purchase from the Columbian Oil Co. of 100,000 barrels of oil at 20 cents per barrel, and also 25,000 barrels per month for the next ten years.

A Deep Well.—A record for deep drilling is now furnished from the Kansas and Indian Territory fields, for quite recently a well has been sunk ten miles south-east of Cleveland, which is now 2,750 feet deep. The tools are fastened, and so drilling cannot be proceeded with.

A New Pipe Line.—Work is proceeding rapidly upon the new pipe line for the Commercial Oil Co., of Houston, which line is to run from Batson to Saratoga. The line will be five miles in length, and will have a pumping station at Batson and a loading rack at Saratoga.

Oil Prices Advancing.—There has been an all-round advance in crude oil prices in Texas since the beginning of the month, 60 cents being paid for Spindle Top oil, and 51 cents for the Sour Lake product. The highest market has therefore been reached for the past two years.

The Output at Saratoga.—The daily production of the Saratoga field is now placed at about 7,000 barrels. This is in excess of the production during February, when it was under 6,000 barrels daily. The Guffey Co.'s gusher has had a great deal to do with the increased output now registered from the field.

Wildcatting at Dayton.—Wildcatting in the Dayton oil district is now a feature of the situation in South-east Texas. The Paraffine Oil Co. is putting down a test nearly two miles distant from the recognised field, while the Producers' Oil Co. in order to thoroughly test outlying territory, has acquired 25 acres in territory adjacent to the field.

Large Oil Deliveries.—For the first time in the history of the American south-western fields, the oil deliveries have exceeded the total placed in tankage. For the first fortnight in March, the average daily runs were 50,720 barrels, and the deliveries for the same period were 26,416 barrels per day, the deliveries thus exceeding the amount placed in the tanks by about 2,112 barrels daily.

In the Jennings Field.—Drilling has been stimulated in the Jennings field during the past month by the continued flowing of the Heywood Oil Co.'s No. 1 well, which was brought in during February. At first the well was said to be producing about 13,000 barrels daily, and at the present time it is now making 7,000 barrels daily. Preparations are now being made for the drilling of other wells in like spots in the field. The field's production is now greatly increasing.

Conditions at Humble.—It is reported in the *Oil Investors' Journal* that conditions in the Humble field underwent a distinct change during the first half of March, for during that period nearly 1,000 barrels of new production were obtained. This not only checked the steady decline experienced for the past few months, but brought the production up to an amount above that recorded in February. The field is now making about 9,000 barrels daily. On March 15th, stocks at Humble were approximately 2,590,000 barrels, the J. M. Guffey Co. holding about one-half of this quantity.

AMERICAN PETROLEUM EXPORTS.

STATISTICS FOR FEBRUARY.

According to the official publication of the Washington Bureau of Statistics, the exports of petroleum from America from the various ports during February were as under:—

	1905. Quantities. Gallons.		1906. Quantities. Gallons.
Crude—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	3,544,463		5,682,200
New York	—		12,983
Philadelphia	323,870		1,493,145
Galveston	732,713		5,306,542
Total	4,601,046	Total	12,494,870
Total value for the month, 1905			$256,171
,, ,, ,, 1906			$683,651
Naphthas—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	—		41,565
New York	1,628,887		492,582
Philadelphia	1,892,867		457,623
Galveston	—		—
Total	3,521,754	Total	991,770
Total value for the month, 1905			$252,510
,, ,, ,, 1905			$103,593
Illuminating—			
Baltimore	1,194,983		15,155
Boston and Charlestown	4,449		85,497
Delaware	—		2,625
New York	28,201,501		34,352,415
Philadelphia	18,447,717		13,574,151
Galveston	—		—
Total	47,848,650	Total	48,029,843
Total value for the month, 1905			$2,938,310
,, ,, ,, 1906			$3,010,497
Lubricating and Paraffin—			
Baltimore	158,450		574,750
Boston and Charlestown	9,351		8,222
Delaware	—		—
New York	5,497,051		9,641,662
Philadelphia	1,587,351		2,800,010
Galveston	—		907,952
Total	7,252,203	Total	13,932,596
Total value for the month, 1905			$926,052
,, ,, ,, 1906			$1,771,781
Residuum—			
Baltimore	—		—
Boston and Charlestown	4,014		—
Delaware	—		1,515,740
New York	768,600		—
Philadelphia	1,925,826		658,688
Galveston	—		2,880,150
Total	2,699,340	Total	5,054,578
Total value for the month, 1905			$86,388
,, ,, ,, 1906			$146,254
Total Mineral Oils—			
Baltimore	1,353,433		589,905
Boston and Charlestown	18,714		93,719
Delaware	3,544,463		7,242,130
New York	36,096,039		44,499,642
Philadelphia	24,177,631		18,983,614
Galveston	732,713		9,094,644
Total	65,922,993	Total	80,503,657
Total value for the month, 1905			$4,459,431
,, ,, ,, 1906			$5,715,777

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Yokohama Imports of Petroleum.—The monthly report of the Yokohama Chamber of Commerce states that the imports of petroleum into Yokohama during January were 1,361,606 gallons, and were valued at 295,553 yen. The imports of petroleum products for the similar period of 1905 amounted to 1,710,000 gallons, and were valued at 364,000 yen.

THE ILLINOIS OIL FIELDS.

DETAILS OF THE NEW TERRITORY.

More details are to hand concerning the developments which are taking place in the Illinois oil field. At the present time the field embraces a small amount of developed territory located in Westfield, Casey, Parker and Johnson townships, Clark county; Hulton township, Coles county; Union township, Cumberland county; and the developments near the town of Oblong, in Crawford county. In the territory mentioned there have been close on to 400 wells drilled to a depth varying from 200 to 1,050 feet. The northern edge of the field or pool, as far as present developments, prove the oil formation to lay nearer the surface, with outcroppings in the broken country west of Paris, along the line of the Terre Haute and Indianapolis railroad. In Edgar county, a stray oil formation has been found in a well about a mile south-east of Barton, which shews for small pumper at a depth of 360 feet. This well has never been thoroughly tested, but demonstrates that this formation contains more or less oil. Experiments to the south and south-west in this shallow sand field have so far developed nothing, but southern developments go to prove that the Casey formation dips rather suddenly, and records of wells drilled have shewed no oil, but an abundance of salt water. Developments to the east in a southerly direction from the hamlet of Martinsville, and south-east of Casey in the southern part of Clark county, have developed several gas wells with a pressure better than 400 pounds, and which are producing gas at the rate of from 500,000 to 2,500,000 cubic feet per day.

Developments have spread rapidly over several of the adjoining counties, and in Oblong township, Crawford county, about 30 miles south of Casey, a test drilled about a month ago on the J. W. Shires farm in the north-east quarter of section 15, is holding up at about 20 barrels a day, and, coming from the white sand formation, is the best grade of crude yet found in the new Illinois field.

Up to date the total extent of the Casev sands may have been reached, as the opinion is that the three sands found at a depth ranging from 180 to 400 feet are about the only formations in which oil will be found, and the finding of large bodies of salt water at a depth varying from 550 to 700 feet shews conclusively that in this particular district no oil will be found below the salt water sand, but the southern developments have renewed activity, and the operations of this coming spring and summer will demonstrate the extent of all three sands.

Geologists, who have been in these districts for the past few weeks, have so far been silent, and have made no statements as to the exact relationship of the three producing oil sands in the new field, but the Princeton development has long since told the oil operator of its staying qualities and developments of the future throughout the Illinois oll fields will be carried on with the intention of tapping the deeper sands.

The supposition of many is that the Illinois field will extend to the north along the Illinois-Indiana State line, passing through the counties of Wabash, Jasper, Lawrence, Edwards, Richland, Crawford, Clark, Cumberland, Coles, Edgar, Vermillion, and Iroquois, thence connect with the shallow developments in the Kankakee Valley, in Jasper county, Ind. The field will not be a continuous one, but instead will be found in pools, as the drill has already demonstrated. At Princeton, the oil strata is found at about 1,100 feet, and it gradually rises to the north until Jasper county, Ind., developments are reached, where the oil is found at from 60 to 250 feet from the surface.

The development of these new oil fields with Casey, Clark county, as the principal headquarters to the north, and Robinson, Crawford county, to the south, continue to attract operators from other American fields, says the current issue of the *Petroleum Gazette.* Recently the roads and ground conditions of the regions have been such as to hold operations down to the minimum, but a number of good wells were added to the list during February, and there has been special activity in leasing and related deals, and in preliminaries to a rush in field work. During the month the shipments reported were 300 tanks or about 75,000 barrels, but these shipments were practically limited to those made by rail from ths original point of development north of Casey, in Clark county. To the southward, in Crawford county, the oil has as yet no outlet to market, and the productive welle drilled are either shut down or being pumped into storage. It is expected that construction will soon begin on a pipe line from the Illinois fields to the Standard's refinery and storage tanks at Whiting, Ind. In the meantime the Standard has bought a tank farm north of Casey, and has begun work for the construction of storage there.

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PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Spies Petroleum Co., Ltd.—The output for the week ended April 8th was 122,730 poods, or 1,979 tons.

Baku Russian Petroleum Co., Ltd.—The production for the week ended March 31st was 298,000 poods, or 4,805 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended April 1st was 307,000 poods, or 4,956 tons.

The European Petroleum Co., Ltd.—The production for the week ended April 1st, 1906, was 96,868 poods, or 1,562 tons.

◆

The Operations of the Shikhova Petroleum Company at Baku in 1905 resulted in a profit of 194·163 roubles, all of which was applied for writing off the properties and for reserve no dividend being declared. The preceding financial year resulted in the same unsatisfactory way for the shareholders.

The American Oil Market.

New York, Week ended March 24th.

The report from the producing districts of the older producing States during the past week have been rather meagre, probably due to the unfavourable weather, which came just as the operators began to look for permanent improvement and better condition of the roads. While the reports, as a whole, shew little improvement in the results of field operations, a few good wells have been brought in. Two of these were in Tyler county, W.Va., and, as they were wildcats and considerably in advance of developments, they are regarded as indicating extensions of considerable importance, while some contend that they indicate a new pool. These lucky strikes have stimulated further drilling in their vicinity, and have encouraged wildcat operations, the hope being that other equally good strikes may result in other directions remote from defined territory. For many months this class of operations has proved very disappointing, as dry holes, or, at best, a gas well, have rewarded the driller, but now new courage has been given, and we may expect to hear of operations being extended in every direction. The large majority of the completions reported during the past week, however, have been small pumpers, with an occasional good well, says the *Oil, Paint and Drug Reporter*, while the percentage of failures to find oil has shewn little, if any, improvement. Operations in Kansas and the Territories' oil districts continues unchecked, and production has now increased to over 50,000 barrels a day, while the deliveries amount to but little more than one-half of that quantity, and consequently stocks continue to increase at a rapid rate. In Texas development work continues unchecked, and the production shews slight improvement, while the demand is increasing. Prices are hardening. Latest quotations are:—Batson 31@37c., as to gravity; Humble, 39c.; Saratoga, 36c.; Sour Lake, 36@45c., as to gravity; Spindle Top, 54c.; and Jennings, 28c.

Refined and Products.—There has been a slight easing off in the demand for refined for export, but this is attributed to the fact that fewer tank steamers have been on this side requiring cargoes. There is no change in the conditions abroad to lead to the expectation of smaller requirements, and the outlook indicates that the export movement will equal that of last year. The engagements during the past week foot up about 200,000 barrels.

The price for barreled oil has remained steady at 7·60c. for New York loading, and at 7·55c. for Philadelphia loading. The principal foreign markets are easier. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. 3d. @ 3s. od. to Continental ports, as to port and vessel.

Cases for export have been in fair request, and sales of about 225,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in light request, and sales of about 10,000 barrels are reported. Pennsylvania crude is quoted at 7·60c. in barrels.

Crude naphtha continues steady. For export, sales of about 5,000 barrels have been reported.

CLOSING QUOTATIONS.

Crude.		Week ended Mar. 17. 1906.	Mar. 24. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4 70	4·70
Residuum, bbls for export	.. ..	6@6½	6@5½

Crude at the Wells.

The quotations for oil represented by credit balances were:—

	Week ended Mar. 24. 1905.	Mar. 24. 1906.
Tiona	1·51	1·68
Pennsylvania	1·36	1·58
North Lima	0·91	0·94
South Lima	0·86	0·89
Indiana	0·86	0·89
Canadian Oil:		
Petrolia	1·33	1·34

Refined—For Export.

		Week ended Mar. 17.	Mar. 24.
Cargo Lots for export	per gal.	7·60	7·60
In bulk		4·70	4·70
Philadelphia loading		7 55	7 55

Refined in Cases—110 Fire Test.

	Week ending Mar. 17.	Mar. 24.
5,000 to 10,000	10·35	10 35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended Mar. 17.	Mar. 24.
120 fire test, S.W.	per gal...	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ending Mar. 17.	Mar. 24.
Naphtha, crude, car lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	17	17

Pennsylvania Oil Runs from Mar. 16th to Mar. 21st were:—Mar. 16th, 69,246; Mar. 17th and 18th, 110,426; Mar. 19th, 52,677; Mar. 20th, 49,789; Mar. 21st, 53,421. For the month of February, 1,958,573.

The Deliveries of Pennsylvania Oil for the same dates were:—93,360; 132,426; 81,151; 65,675; 73,381. For the month of February, 2,085,194.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended March 23rd and from Jan. 1, were as follows:—

	Week.	Year.	1905.
Refined, barrels and bulk	204,300	2,580,600	2,135,800
Refined, cases	226,000	3,118,000	6,759,000
Crude, barrels and bulk	—	384,500	257,500
Crude, cases	—	65,000	50,000
Naphtha, barrels	—	89 800	128,700
Residuum, barrels	24,500	139,500	230,400
Lubricating, barrels	21,400	106,900	47,200
Total, barrels cde. eq.	395,793	5,593,133	6,108,878

Clearances for the Week.

During the week ended Mar. 23rd, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1905.
Refined	9,584,280	108,986,030	102,639,625
Crude	1,500	211,600	591,138
Naphtha	63,500	3,417,550	2,680,196
Residuum	—	—	3,294,915

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Mar. 23rd	12,780,540
Total from New York, from Jan. 1, 1906	145,532,987
Same period last year	137,443,972
Increase	8,089,015
From United States, week ended Mar. 23rd	23,615,097
Total from United States, since Jan 1, 1906	261,858,455
Same period last year	248,830,235
Increase	13,028,220

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The "Review" Shipping List.

April 9, 1906.

Specially Prepared for this Journal.

(*The following abbreviations are used in this table:*—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For	Latest Date and Position.
ALICE ISABELLE	Philadelphia	Sables d'Olonne	P. Reedy Island, Feb. 28
ALCHYMIST	Terneuse	London	Arr. Mar. 17
AMERICAN	New York	Antwerp	Arr. Apr. 3
APPALACHEE	SanFrancisco	Shanghai	Arr. Mar. 19
APSCHERON	Batoum	Hamburg	P. Tarifa, Apr. 1
ARAL	Philadelphia	Dover	L. Mar. 26
ARAS	Batoum	Hull	L. Consti'ple, Mar. 27
ARGYLL	Port Arthur (Texas)	Portland (O.)	L. Mar. 19
ASTRAKHAN	Tyne	Philadelphia	P. Butt of Lewis, Mar. 31
AUGUST KORFF	New York	London	L. Apr. 1
AUREOLE	Tyne	Philadelphia	Arr. Mar. 24
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Tyne	Ibrail	Arr. Mar. 29
BALAKANI	Manchester	Philadelphia	Arr. Mar. 26
BATOUM	Tyne	Port Arthur (Texas)	Arr. Mar. 16
BAYONNE	Venice	Philadelphia	At Gibraltar, Mar. 26
BEACON LIGHT	Philadelphia	Bilbao	P. Del. Break., Mar. 25
BEME	Bombay	Rangoon	L. Kurrachee, Mar. 9
BLOOMFIELD	Bremerhaven	Tyne	Arr. Mar. 13
BORJOM	Alexandria	Batoum	Arr. Mar. 11
BRILLIANT	Hamburg	Philadelphia	Arr. Mar. 29
BROADMAYNE	Kustendje	Rouen	Off Ushant, Apr. 4
BULLMOUTH	Shanghai	—	L. Singapore, Apr. 3
BULYSSES	Tyne	—	Arr. Mar. 29
BURGERMEISTER PETERSEN	Stettin	New York	Arr. Mar. 28
CADAGUA	—	—	In port, Bilbao, Mar. 29
CALCUTTA (Br. bq.)	SanFrancisco	Shanghai	L. Mar. 14
CARDIUM	Blexen	Cardiff	Arr. Mar. 31
CAUCASIAN	London	Philadelphia	Arr. New York, Mar. 27
CHARLOIS	Philadelphia	Amsterdam	P. Del. Break, Mar. 25
CHESAPEAKE	Tyne	New York	Arr. Mar. 30
CHESTER	Philadelphia	Antwerp	Arr. Mar. 30
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Shanghai	—	L. Mar. 30
COWRIE	Singapore	—	L. Mar. 27
CYMBELINE	Batoum	Manchester	Arr. Apr. 3
CZAR NICOLAI II.	Rouen	Batoum	At Swansea, Apr. 2
DAGHESTAN	Antwerp	Batoum	P. Dungeness, Mar. 26
DAKOTAH	San Francisco	Shanghai or Canton	L. Mar. 10
DELAWARE	Liverpool	Philadelphia	P. Brow Head, Mar. 30
DEUTSCHLAND	New York	Dublin	L. Mar. 21
DIAMANT	Hamburg	Philadelphia	In Tyne, Mar. 30
ELAX	Newcastle (N.S.W).	—	L. Apr. 3
ELISE MARIE	New York	Rotterdam	L. Mar. 25
ENERGIE	New York	Hamburg	Arr. Mar. 22
ERIVAN	Antwerp	Philadelphia	Arr. Apr. 2
EUPLECTELA	Philadelphia	Hamburg	Arr. Apr. 1
EXCELSIOR	Hamburg	New York	Arr. Apr. 1
EZIO	—	—	Coasting Peru
FRANCE MARIE	Philadelphia	Marseilles	P. Del. Break., Mar. 4
GEESTEMUNDE	Philadelphia	Copenhagen	Arr. Apr. 3
GENESSE	Manchester	Philadelphia	L. Liverpool, Apr. 3
GEORGIAN PRINCE	Havana	Liverpool	Arr. Apr. 4
GOLDMOUTH	Cardiff	Singapore	L. Suez, Mar. 29
GRAF STROGANOF	—	—	Sold U.K. and named Ashtabula In Tyne, Jan 10
GUT HEIL	New Orleans	Havana	L. Port Eads, Mar. 26
HAINAUT (Dch.shp.)	Antwerp	Alexandria	Arr. Apr. 2
HARRY WADSWORTH	Port Arthur (Texas)	Liverpool	Arr. Mar. 10
HELIOS	Alexandria	Syria	L. Port Said, Mar. 20
HOTHAM NEWTON	Middlesbro'	Batoum	L. Mar. 29
HOUSATONIC	Newcastle (N.S.W.)	SanFrancisco	Arr. Mar. 11
IMPERIAL	—	—	Tr. on Lakes btn., U.S. and Can.
JOANNIS COUTZIS	Piræus	Taganrog	L. Consti'ple, Mar. 25
J.B. AUG. KESSLER	Rotterdam	Constant'ple	Off Ushant, Apr. 2
JAMES BRAND	Thameshaven	Tyne	Arr. Mar. 17
KURA	Port Talbot	Constant'ple	L. Mar. 30
LA CAMPINE	Antwerp	Philadelphia	Arr. Mar. 29
LA FLANDRE	Philadelphia	Ghent	Arr. Apr. 1
LA HESBAYE	Batoum	Antwerp	Off I. of W., Apr. 4
LA MADALEINE	Medi'ranean	—	P. Gibraltar, Mar. 31
LA VIGUESA	Vigo	Marcus Hook	Arr. Mar. 23
LACKAWANNA	Philadelphia	Calcutta	At Port Said, Apr. 1
LE COQ	Philadelphia	La Pallice	Arr. Mar. 26
LOUTSCH	Barcelona	Novorossisk	L. Const'iple, Sept. 5
LUCERNA	Novorossisk	Hamburg	L. Apr. 3
LUCIFER	Liverpool	Philadelphia	P. Old Head of Kinsale, Mar. 28
LUCIGEN	Novorossisk	Rotterdam	P. Gibraltar, Apr. 3
LUCILINE	Marcus Hook	Dunkirk	P. Del. Break., Mar. 23
LUMEN	Tyne	Philadelphia	Arr. Apr. 4
LUX	Rouen	Philadelphia	P. Lizard, Mar. 29
MAKKAVEI	Sulina	Novorossisk	L. Mar. 20
MANHATTAN	New York	Venice	L. Mar. 17
MANNHEIM	New York	Hamburg	L. Mar. 22
MARGARETHA	Banes	Norfolk (Va.)	Arr. Mar. 24
MEXICAN PRINCE	Tyne	Cuba	P. Dungeness, Mar. 28
MIRA	New York	—	L. Mar. 29
MUREX	—	Palembang	Arr. Apr. 2
NARRAGANSETT	London	New York	P. Southend Mar. 28
NERITE	Palembang	Swatow	Arr. Apr. 1
NEW YORK	New York	Southampton	L. Mar. 31
OCEAN	Philadelphia	Amsterdam	P. Del. Break., Mar. 25
ORANJE PRINCE	Tyne	Cuba	P. Lizard, Apr. 4
ORIFLAMME	Philadelphia	Blaye	Arr. Apr. 2
OSCEOLA	Norfolk	Bluefields	L. Inagua, Feb. 22
OTTAWA	Philadelphia	London	Arr. Apr. 3
OURAL	Antwerp	Batoum	Cl. Constant'ple, Mar. 25
PALEMBANG	Bangkok	Palembang	L. Jan. 10
PAULA	New York	Lisbon	L. Mar. 22
PECTAN	London	Galveston	P. Prawle Pt., Mar. 27
PENNOIL	Tyne	Philadelphia	Arr. Mar. 27
PERLAK	Calcutta	Aroe Bay	L. Mar. 9
PETROLEUM	—	Gibraltar	Arr. Sept. 18
PHOEBUS	Hamburg	New York	Off I. of W., Mar. 30
PINNA	Cardiff	Port Arthur (Texas)	P. Barry Island, Apr. 4

Vessel.	From.	For.	Latest Date and Position.
POTOMAC	Sunderland	Philadelphia	P. Dunnet Head, Mar. 28
PROMETHEUS	London	New York	L. Southampton, Mar. 29
PRUDENTIA	Cette	Rouen	P. Peniche, Apr. 2
RION	Port Arthur (Texas)	London	L. Newport News, Mar. 21
ROCK LIGHT	Kustendje	—	L. Mar. 20
ROSSIJA	Hamburg	Batoum	P. Malta, Apr. 2
ROTTERDAM	New York	Rotterdam	Arr. Mar. 18
RUSSIAN PRINCE	Boston	—	At Havana, Mar. 15
SALAHADJI	Singapore	Sanga Sanga	L. Jan. 21
SEMINOLE	Calcutta	San Francisco	P. Hong Kong, Mar. 10
SILVERLIP	Port Arthur (Texas)	—	L. Mar. 24
SINGU	Bombay	Rangoon	L. Feb. 28
SNOWFLAKE	Hull	Philadelphia	Arr. Apr. 2
SOPHIE	Tunis	Kustendje	Arr. Mar. 27
SPONDILUS	Singapore	—	L. Mar. 26
STANDARD	Philadelphia	Swinemunde	P. Del. Break., Mar. 21
STROMBUS	Cardiff	Singapore	L. Mar. 31
SURAM	Batoum	London	Arr. Apr. 4
SUWANEE	London	New York	L. Mar. 31
SVIET	Alexandria	Odessa	Arr. Feb. 16
TELENA	Singapore	—	L, Table Bay, Mar. 11
TEREK	Manchester	Batoum	P. Gibraltar, Mar. 28
TIFLIS	Novorossisk	Batoum	L. Mar. 24
TIOGA	Batoum	Liverpool	Arr. Nov. 25
TONAWANDA	New York	Bombay	Arr. Mar. 16
TROCAS	Yokohama	—	L. Mar. 30
TURBO	Philadelphia	—	L. Mar. 30
TUSCARORA	New York	Calcutta	At Suez, Mar. 22
TWINGONE	Madras	Rangoon	L. Mar 11
VEDRA	Hamburg	Tyne	Arr. Mar. 14
VILLE DE DIEPPE	Philadelphia	Dieppe	Arr. Mar. 15
VILLE DE DOUAI	Dunkirk	Hull	Arr. Apr. 2
VOLUTE	Palembang	Shanghai	Arr. Apr. 3
*WEEHAWKEN	Sumatra	Port Natal	Arr. Mar. 14
WILLKOMMEN	New York	Swinemuude	L. Mar. 31
WINNEBAGO (Late Kinsman)	Bombay	San Francisco	Arr. Mar. 27

* Supposed sailed March 14 and 15 after coaling.

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

April 11th, 1906.

Since our last report petroleum is ¼d. higher in price, and is now quoted :—

Russian and Roumanian, 6d. ; American, 6¼d. ; Water White, 7¾d.

LUBRICATING OILS

are unchanged as follows :—

American pale, £7 15s. to £9 10s.
American dark cylinder, from £7 10s.
American filtered cylinder, from £11.
Shellene, £5.

TURPENTINE.

American Turpentine has been fairly strong at 47s. 6d., but has eased off a little, and may now be quoted for Spot 47s. 3d. to 47s. 6d., and for June 1s. less.

LIVERPOOL OIL MARKET.

April 10th.

Refined oils are quiet, but sellers now quote 6½d. for Russian and 6⅝d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, April 10th.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, April 10th.

Standard White is quoted at 7·55.

RUSSIA.

Baku, April 10th.

The oil market is firm, but prices have declined still further. Light crude oil is quoted spot, 26 copecs; delivery at end of April, 26¾ copecs; in six months, 27⅜ copecs.

BELGIUM.

Antwerp, March 31st.

The petroleum market is stagnant, and sales are made only for immediate requirements. Price of Standard White, spot, 19½ francs; April, 19¾ francs; May, 20 francs.

GERMANY.

Hamburg, March 31st.

The kerosene market is weak. The price of American Standard White is 7·10 marks per 50 kilos.

ROUMANIA.

March 31st.

Prices of petroleum products inland are :—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	3·40-3·50
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery	3·00- —
Paraffin	120·00-125·00
Lubricating Oils —	
Agricultural	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octroi tax of 12 fcs. per 100 kilos.

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
„ sp. gr. 0·720-0·725	8·00- 9·00
„ sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

Bombay, March 17th.

Market unchanged on prices (except for Cobra brand, which is 2 annas lower than last week) :—

American, "Snowflake," 150 deg.	Rs.	6	0	2
„ Chester, 125 deg.		4	8	2
„ Monkey Brand, 125 deg.		4	2	2
Russian, "Anchor," 125 deg.		4	11	0
„ "White Camelia" brand, 125 deg.		4	0	2
Borneo Cobra, in tins, per pair		3	3	0
Sumatra "Rising Sun," bulk		2	15	0
„ "Rising Sun," bulk, in local made tins		3	10	0
„ Silverlight Cases, per case		4	8	0
Burma Oil, in bulk, per 8 imperial gallons		2	11	0
„ "Elephant" brand, in local made tins		3	10	0
„ Bulk, in Bombay Bazaar, 125 deg. per 10 gallons		3	3	0
Borneo oil in bulk		2	14	6

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IMPORTS of PETROLEUM into UNITED KINGDOM

FOR THE WEEK ENDED APRIL 3rd, 1906.

Specially prepared for this Journal by the Custom House.

Date.	Port into which Imported.	Consignee.	Vessel.	Packages.	Description of Oil.	Number of Gallons.	Port Whence.
Mar. 28	London	Anglo-American Oil Co	Minnetonka	2050 brls.	Lub.	82,000	New York
,, 28	,,	,,	Ottawa	Bulk	Gas	968,990	Philadelphia
,, 28	,,	Vacuum Oil Co.	Minnetonka	545 pks.	Lub.	19,560	New York
,, 28	,,	Felton and Crepin	City of London	80 brls.	Pet. Spirit	3,270	Brussels
,, 29	,,	Shell Transport Co.	Timsah	Bulk	Fuel	172,800	Amserdam
,, 29	,,	United Shipping Co.	Sergei	60 brls.	Lub.	2,400	Riga
,, 30	,,	Pure Oil Co.	East Point	251 brls.	,,	10,040	Philadelphia
April 2	,,	B. Jacobs and Sons	,,	100 br s.	,,	4,140	,,
,, 2	,,	Wilkins, Campbell and Co.	,,	115 brls.	,,	4,600	,,
,, 2	,,	Anglo-American Oil Co.	,,	620 brls.	,,	24,800	,,
,, 2	,,	J. Spurling	Minnetonka	5 brls.	,,	200	New York
,, 2	,,	Consolidated Petroleum Co.	Suram	Bulk	Lamp	924,000	Batoum
,, 2	,,	London Oil Storage Co.	Cressida	123 pks.	Lub.	2,150	Hamburg
,, 3	,,	Balfour, Wilkinson and Co.	Astronom	14 brls.	,,	570	,,
,, 3	,,	T. H. Lee	Iris	5 brls.	Tar oil	250	,,
,, 3	,,	General Petroleum Co.	Zephyr	612 steel brls.	Pet. Spirit	27,500	Rotterdam
,, 3	,,	R. Park and Co.	Hardy	88 pks.	Lub.	800	Treport
,, 3	,,	J. Harrison	,,	80 pks.	,,	800	,,
,, 3	,	Lucas aud Spencer	Mackinaw	120 brls.	,,	4,800	Philadelphia
Mar. 28	Liverpool	Vacuum Oil Co.	Norseman	160 pks.	,,	5,200	New York
,, 29	,,	W. B. Dick and Co.	,,	425 brls.	,,	17,920	,,
,, 29	,,	Evans, Sons, Lescher and Webb	,,	10 brls.	,,	490	,,
,, 29	,,	Liverpool Storage Co.	,,	824 brls.	,,	32,960	,,
,, 29	,,	G. B. Taylor	,,	2404 brls.	,,	96,160	,,
,, 29	,,	Liverpool Warehousing Co.	Ulstermore	180 brls	,,	5,400	Baltimore
,, 29	,,	Anglo-American Oil Co.	Genesee	Bulk	,,	394,700	Philadelphia
,, 29	,,	Meade-King, Robinson and Co.	Syria	150 brls.	,,	6,000	Trieste
,, 2	,,	Pickfords, Ltd.	Anna Tielde	11 pks.	,,	210	Hamburg
,, 2	,,	A. Hopps and Sons	Vedamore	60 brls.	,,	2,460	Baltimore
,, 2	,,	Valvoline Oil Co.	Umbria	330 brls.	,,	13,530	New York
,, 3	,,	Ismay, Imrie and Co.	Celtic	50 brls.	,,	2,000	,,
Mar. 29	Bristol	H. R. James and Son	Kansas City	808 brls. 30 ½-brls.	,,	32,920	,,
,, 29	,,	,,	,,	476 brls.	Min. Colz	19,040	,,
,, 30	,,	Collins and Co., Ltd.	,,	80 brls.	Lub.	3,200	,,
,, 30	,,	W. Smith and Co.	,,	390 brls.	,,	15,600	,,
,, 29	Grimsby	J. Sutcliffe and Sons	Oldham	11 brls.	,,	440	Antwerp
,, 30	,,	,,	Wrexham	30 brls.	,,	1,200	,,
,, 29	Hull	T. Wilson, Sons and Co.	Juno	325 brls.	,,	13,000	Hamburg
,, 29	,	,,	Cito	16 brls.	,,	640	,,
,, 29	,,	,,	Bruno	250 brls	,,	10,000	,,
,, 29	,,	,,	Tasso	10 brls.	,,	400	Bergen
,, 29	,,	,	Sultan	236 brls.	,,	9,440	Antwerp
,, 30	,,	,,	Truro	12 brls.	,,	480	,,
,, 29	Manchester	Pure Oil Co.	Man. Corporation	301 brls.	,,	12,040	Philadeldhia
,, 29	,,	Liverpool Storage Co.	,, ,,	60 brls.	Lamp	2,500	,,
,, 29	,,	Crew, Levick Co.	,, ,,	1268 brls.	Lub.	53,140	,,
,, 29	,,	G. B. Taylor	,, ,,	3730 brls.	,,	149,200	,,
,, 29	Newcastle	Tyne-Tees Steam Shipping Co.	New Oporto	4 brls.	,,	160	Hamburg
,, 29	Southampton	American Line	Philadelphia	20 brls.	,,	800	New York
,, 29	Grangemouth	W. G. Yooll and Co.	Scalpa	50 brls.	Lamp	2,000	Hamburg
,, 29	,,	,,	Staffa	50 brls.	,,	2,000	,,

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DATE.	PORT INTO WHICH IMPORTED.	CONSIGNEE.	VESSEL.	PACKAGES.	DESCRIPTION OF OIL.	NUMBER OF GALLONS.	PORT WHENCE.
Mar. 29	Leith ..	Graham-Yooll and Co.	Vienna	50 brls.	Lamp ..	2,180	Hamburg
,, 29	,, ..	J. Currie and Co.	,, ...	50 brls.	Lub. ..	2,000	,,
,, 29	,, ..	G. Gibson and Co.	Peveril	6 brls.	,, ..	240	Antwerp
,, 29	,, ..	Henderson and McIntosh	Adra	2264 brls.	,, ..	90,560	Philadelphia
,, 29	Belfast ..	G. Heyn and Sons	Black Head ..	30 brls.	,, ..	1,200	Riga
					NET TOTAL	3,253,090	

AN IMPORTANT REFINING PROPOSAL FOR AMSTERDAM.

The Austrian Consul in Amsterdam, in a report to his Government, mentions that the Dordtsche Petroleum Maatschappij, who have large petroleum properties and refineries in Java, are about to erect at Amsterdam works for the manufacture of lubricating oils and paraffin scale, for which purpose they will use the residuals of their Java refinery. An interesting point in this proposal is the way in which these residuals will be brought over from Java to Holland. The Dutch mail steamers have double bottoms, the space between which is divided into several water-tight compartments, which are filled with water ballast according to the requirements. It is now proposed to use the petroleum residuals as ballast instead of water. The residuals, therefore, will be shipped to Holland at the cheapest rate possible, thus rendering possible the utilisation of a product which for climatic reasons cannot be properly done on the spot. On the other hand, the shipowners will turn to good account space which was formerly wasted.

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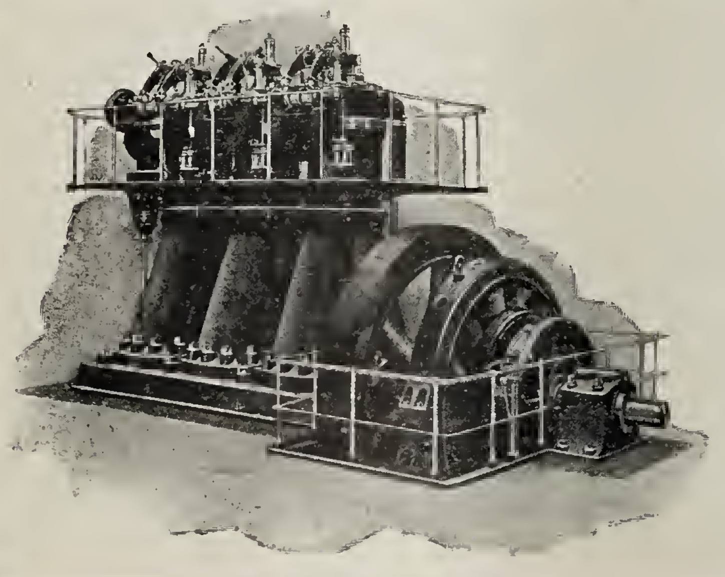

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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XIV. *(New Series.)* April 28th, 1906. No. 371.

Editorial Notes.

The San Francisco Disaster. Fortunately for all concerned, the terrible disaster at San Francisco has had little or no effect upon the Californian petroleum industry. At one time it was freely expressed that the various producing territories must have suffered considerably owing to their being within the earthquake zone, but the information which has now reached the various English companies operating in California, goes to shew that their interests are secure, and business will, if anything, only be temporarily dislocated. Such news is certainly very gratifying, for it would have been extremely unfortunate had anything occurred which would have proved a serious set-back to the State's petroleum industry, especially at the present time, when matters are taking such a pronounced leap forward. The companies having agencies and offices in San Francisco have, of course, suffered to some extent, but so far as the producing localities are concerned, the latest information is very re-assuring.

Petroleum in Trinidad. Nothing could have been more *apropos* than the address delivered before an influential gathering at the West India Committee Rooms, on Thursday afternoon, by Mr. Randolph Rust, upon Trinidad and its petroleum deposits. The advent of liquid fuel and the marked progress that it is now making, consequent upon its adoption by the British and other admiralties, must, to the far seeing, suggest that if only Trinidad's resources are fostered and developed in a proper manner, that Colony bids fair to rank as one of the most important of our possessions beyond the seas. The fact has long ago been clearly established that Trinidad is remarkably rich in petroleum deposits, and though, thanks to the Government geologists and Mr. Randolph Rust, much has been done to map out the petroliferous areas, we venture to suggest that, so far, the half has not been told. If the meeting on Thursday does nothing more than arouse greater interest to be taken in the mineral wealth of the Colony, then the objects it achieves will be assuredly great.

Baku Production Increases. Though perhaps not with that rapidity which at one time seemed almost assured, the Baku oil fields are returning to their normal condition, and, month by month, the production makes a move nearer the 50,000,000 pood mark. This figure, it may be mentioned, is one which can satisfy the normal requirements of the market, and therefore anything below this amount must necessarily fail to fully meet the demand. During March the Baku fields produced nearly 39,000,000 poods, which is an advance of about 8,000,000 poods over the figures of February, the shortest month of the year, and thus it is clear that the efforts directed toward restoring the production have been attended with considerable success. The Baku fields have produced 103,000,000 poods of oil during the first quarter of the year, which amount is a decline of 30,000,000 poods from the figures for the corresponding three months of last year, and 40,000,000 poods when compared with the production during the first quarter of 1904. In the details which are given upon another page of this issue some interesting information is recorded as to prices.

Developments in Roumania. The latest information concerning the Roumanian petroleum industry shews that at the present time the oil fields are receiving considerable attention on the part of the various operating concerns, in fact almost all the principal companies are preparing to start new boring operations on a large scale. The Steaua Romana is shortly to commence a most energetic campaign in the various fields of the country, and many borings are to be sunk, while the other firms who are about to start important boring operations shortly must be mentioned the Bustenari, Telega, Campina, Moreni, Italo-Romano, International, and a number of other enterprises. The prospect of such vast operations has naturally brought about a great demand for the services of engineers and boremasters. In regard to the latter, the boring school at Campina is now proving of very great value, for the men trained there have proved to be very efficient, while their remuneration is below that paid to foreign boremasters. There is no scarcity of unskilled labour, as the gradual abandonment of the exploitation of hand wells throws out of work the men employed on them, who generally far prefer to take up work on borings. There is no doubt that in a few years the exploitation of hand wells will be a thing of the past, for to-day none ever thinks of digging a new hand well, and as the old hand wells become exhausted, they are replaced with borings.

An Important Move for the German Markets. Negotiations have been proceeding for some time between the Petroleum Produkte Actien Gesellschaft, representing the petroleum interests of the Deutsche Bank, and the Deutsch-Russiche Naphta Import Gesellschaft, representing the Russian petroleum export trade, with a view to obviate competition between Russian and Roumanian oils on the German market. The negotiations are nearing a successful issue, and it is expected that the export of Roumanian oil to Germany, which has lately fallen very low, will now revive to a large extent. The Galician petroleum industry, in which there is also a large amount of German capital, is awaiting the outcome of the negotiations, and is expected to join the combine in the event of its being realised.

March in the American Oil Fields.

Though March is one of the longest months of the year, and contains three more days than February, there was a smaller number of wells completed in the American fields during its run than in the preceding month. This may be taken as somewhat disappointing as shewing a slackening of activity in the producing fields, but what is certainly gratifying is the announcement that during the month there was a decided increase in the new production, for several wells much above the average were brought to light in West Virginia. At the present time, Point Pleasants in Tyler county, West Virginia, is the centre of activity, and though it is generally believed that the area of these new pools cannot be very great, they will tend to stay the decline in the production only for a short time. Apart from West Virginia, there was a general decline in field work, as will be seen from the details published elsewhere.

◆

CALIFORNIAN OILFIELDS, LTD.

The fifth annual meeting of the shareholders of the Californian Oilfields, Ltd., was held at Winchester House, E.C., on Thursday, Mr. Robert Balfour, the chairman of the company, presiding.

The report of the directors shewed a highly satisfactory state of affairs. Since the last report the work of development had progressed favourably. On June 30th last year the company had 34 producing wells, but since that time that number had been increased to 39. The quality of their product was practically unchanged. The directors recommend a dividend of 30 per cent. per annum, which would absorb £37,500, while a balance forward was suggested of £11,303.

The Chairman moved the adoption of the report, incidentally referring to the San Francisco disaster to shew that the company's property had not suffered. He spoke upon the increase in the consumption of oil for fuel purposes, and mentioned that the decrease of the shipments of coal into California was in proportion with that increase. Altogether, their company had enjoyed a very prosperous year, and he had pleasure in moving the adoption of the report.

This was seconded and agreed to.

◆

THE BATOUM PETROLEUM EXPORT TRADE IN FEBRUARY.

Notwithstanding the steady demand for oil for export, shipments from Batoum could not possibly develop in February, owing to the limited arrival of supplies from Baku—particularly of kerosene. As a result, the total shipments of petroleum products in February were only 746,000 poods, in which kerosene figured to the extent of 265,000 poods. The last-named quantity consisted of two small cargoes shipped to Russian ports, so that during February no kerosene was shipped to foreign markets. Only toward the end of the month were the exporting firms able to commence accumulating stocks of kerosene as far as it was made possible by the restricted working of the pipe line. Ten per cent. of the total arrivals from Baku came in tank waggons. The following figures shew the movements of petroleum products at Batoum in February:—

	Arrivals.	Shipments.	Stocks on Mar. 1 (o.s.)
Refined Kerosene.. ..	1,414,000	265,000	2,054,000
Kerosene Distillate ..	290,000	—	543,000
Solar Oil	—	—	42,000
Machine Oil	501,000	306,000	37,000
Spindle Oil	95,000	25,000	68,000
Cylinder Oil	7,000	15,000	12,000
Vaseline Oil	—	53,000	16,000
Lubricating Oil Distillate.	68,000	—	113,000
Residuals	190,000	82,000	314,000
Total	2,565,000	746,000	3,199,000

The stocks have, therefore, during February increased by 30 per cent., but a large part of these was shipped early in March. There is a revival of interest in lubricating oils. A fact worthy of note in the February statistics is the absence of any shipments to England. Those in other directions were:—To France, 112,000 poods; to Germany, 139,000 poods; to Belgium and Holland, 217,000 poods; to Turkey, 9,000 poods of case oil; and to Russian home ports, 269,000 poods.

◆

LONDON OIL SHARE MARKET.

Friday, April 27th.

Notwithstanding the general dearth of business on the London Stock Exchange, which was accentuated by the Easter holidays, the past fortnight has been a somewhat anxious one, for the San Francisco calamity affected an extensive area, and for some little time it was uncertain how far securities in many directions would suffer, because the losses sustained by British insurance companies necessitated enormous encroachments on reverse funds and consequent sale of large blocks of securities. It was also feared that America would call for large quantities of gold for re-building and general relief purposes, and so create serious stringency in the money market. Fortunately, subsequent advices were reassuring, and the markets are much steadier again. The fact that the directors of the Bank of England made no change in the bank rate yesterday materially aiding the situation and dispersing apprehensions.

The Oil Share Group has been distinguished by some rather violent fluctuations in Californian oil fields, caused by fears that the property had been involved in the earthquake, and quotations fell away sharply from $6\frac{1}{4}$-$6\frac{1}{2}$ to $5\frac{1}{4}$-$5\frac{3}{4}$; but on Saturday last the shares rallied sharply to $5\frac{3}{4}$-$6\frac{1}{4}$ on the receipt of a cable stating that no damage had been done. Californian refineries have kept very steady at $\frac{3}{8}$-$\frac{1}{2}$ without fluctuation. The European Oil Co.'s meeting resulted in a satisfactory decision to raise new capital, and the Debentures have been in good request, the price advancing from 81-86—first to 83-88 then to 85-90, and finally to 87-92. The Preference Shares have kept about $\frac{1}{8}$-$\frac{1}{4}$.

The reported retirement of the Shell Line Co. from the European market with the intention of confining itself to Asiatic business which promises better results, had an adverse effect upon the price of the ordinary shares, which fell away from 27s. 3d.–27s. 9d. to 25s. 3d.–25s. 9d., but the Preference remain unchanged at $9\frac{1}{4}$-$9\frac{3}{4}$. Baku Ordinary has lost 3d. per share at 4s. to 4s. 6d., the Preference shewing no alteration at 8s. to 8s. 6d., while Anglo-Russians at $\frac{1}{16}$-$\frac{1}{8}$, Assam Oil at $\frac{5}{8}$-$\frac{7}{8}$, Bibi-Eybats at $\frac{7}{16}$-$\frac{9}{16}$, Debentures at 88-93, Russian Ordinary at 12s. to 13s., Preference at 11s. to 12s., Debentures at 87-90, Schibaieff Ordinary at 9s. 6d. to to 10s. 6d., Preference $3\frac{5}{8}$-$3\frac{7}{8}$, and Spies at $\frac{3}{8}$-$\frac{7}{16}$ shew no changes on balance, although a small amount of business, especially in Assam Oil and Spies, was marked.

The fortnightly carry over took place on Tuesday last, when the volume of business to be adjusted was particularly light. The rate of interest charged for Oil Shares was 6 per cent. to 7 per cent., and alterations in "making up" prices from those of the previous settlement were unimportant.

THE EUROPEAN PETROLEUM COMPANY, LIMITED.

MEETINGS OF DEBENTURE AND SHAREHOLDERS.

ISSUE OF SECOND DEBENTURES AGREED UPON.

On Friday, the 20th inst., meetings of the debenture and shareholders in the European Petroleum Co., Ltd., were held at Winchester House, E.C. The first meeting was that of first mortgage debenture holders, and was held for the purpose of passing, if thought fit, an extraordinary resolution sanctioning certain modifications of the rights of the holders of the debentures, and authorising the trustees for the purpose of effecting such modifications to concur with the company in executing a supplemental trust deed in the terms of a draft, consisting of the following clauses:—

1.—The company shall be at liberty to issue £400,000 second mortgage debentures charged on its undertaking after and in subordination to the £376,000 first mortgage debentures aforesaid, save that until the security constituted by the principal trust deed is enforcable, the payment of the interest on the second debentures shall rank as regards current profits next after the interest on the first mortgage debentures and before the sinking fund for the redemption thereof.

2.—In each of the four years ending respectively on the 1st day of May, 1906, the first day of May, 1907, the 1st day of May, 1908, and the 1st day of May, 1909, the company shall, in lieu of being bound to apply £60,096, as provided by condition 6 aforesaid on the first mortgage debentures, be bound to apply only a sum sufficient to pay the interest on the first mortgage debentures for such year, and the difference hereinafter called the sinking fund arrear between that sum and the sum of £60,096 shall only be payable as hereinafter provided, but the company shall be at liberty at any time to satisfy the arrears aforesaid of any such year by setting aside the sum of £25,000, and applying such sum in redeeming or purchasing debentures in accordance with the said condition 6.

3.—In respect of the year ending the 1st of May, 1910, and of each subsequent year ending the 1st of May, the company shall be bound to apply the full sum of £60,096 in accordance with condition 6 aforesaid.

4.—The company shall not pay any dividends to its shareholders prior to the year ending the 1st of May, 1911, and thereafter the company shall not pay any dividends unless and until the sinking fund arrears shall have been paid off or satisfied, save that out of the net profits of any year remaining, after providing the full debenture service fund and paying the interest on the second mortgage debentures to the close of such year, the company may pay a dividend not exceeding 5 per cent. for such year on its preference shares, but it shall be bound, if such remainder shall be more than sufficient to pay such 5 per cent., to apply the balance in or towards paying off or satisfying the sinking fund arrears as aforesaid.

5.—Clause 3 of the principal trust deed shall extend not only to the lands and properties specified in the second schedule to the principal trust deed, but to all the lands and properties which have been acquired by the company since the execution of the principal trust deed.

6.—If the company with the concurrence of the trustees of the principal trust deed shall sell the company's freehold land at Thames Haven, comprising about 15 acres or any part thereof, the net proceeds of the sale, notwithstanding any of the provisions contained in the principal trust deed, shall be applied in purchasing or redeeming a competent part of the first mortgage debentures in accordance *mutatis mutandis* with the provisions contained in conditions 6 to 10 on the first mortgage debentures.

7.—These presents shall take effect by way of modification of the provisions of the principal trust deed, and the first mortgage debentures and the principal trust deed, and these presents shall be read together accordingly, and the second mortgage debenture shall be framed with due regard hereto.

Sir Henry Seymour King, M.P., presided over the meeting, and after explaining how it was that he came to take the chair that day, called upon the chairman of the company to address the debenture holders.

Mr. H. Pike Pease, M.P., said he took it that they were all aware what was the reason of their being called together that day, and therefore it was unnecessary for him to enter at length into the causes which had led to the calling of that meeting. In the first place he desired to say that the directors very much regretted that there should be the cause for that meeting, or the reason why they should issue any further debentures. They were all aware of the calamitous state in which Russia had been in, and they also knew of the general strikes which took place in 1904, which caused them considerable actual and consequential loss. Every effort had been made on behalf of the company to procure compensation from the Russian Government for the damage done, but up to the present time no adequate response had been made. Together with the chairmen of other companies, he had personally been to the Foreign Office, and there made the strongest possible representations. With regard to the whole position, Russia at the present time was in a decidedly better position than it was several weeks ago, and their company's production, he was pleased to say, was on the increase, and the price at which oil was selling was a very good one.

As to the scheme which was before them that day, he had only to say that he was very pleased that they had been able to arrange for the issue of second debentures. It had been a matter of some difficulty, and it had entailed a very large number of meetings with the first debenture holders to consider the general position, and now when they obtained the money, he sincerely trusted that they might be able to put the company upon a sound and flourishing condition.

Mr. Stanley Boulter, in proposing the necessary resolution, said that meeting was the outcome of a meeting called by the directors two months ago. On that occasion a very influential number of the first mortgage debenture holders entertained considerable doubts as to whether the modifications then proposed by the directors were such that they could agree to, and consequently a meeting was held of a considerable number of the debenture holders at which certain of the directors of the company were present, and as a result of that meeting the directors agreed to give further consideration to the scheme which they had put forward, and a committee of the first mortgage debenture holders was appointed to consult with the directors and see whether some proposal could not be made which would be more acceptable to them. The debentures of the company, proceeded the speaker, were to bearer, and so it had been impossible to send out any circulars or give any written information as was always done when the debentures were registered. As a result of the meeting between the committee of the debenture holders and the directors, it was satisfactorily proved that the amount which the directors had proposed to raise in their former scheme would have been totally inadequate for their purpose. As a matter of fact, had the scheme gone through and the amount raised, he was afraid the difficulties of the company would not have been overcome, and it had therefore been necessary to put forward a scheme which provided for some augmentation of the amount which the directors originally suggested should be raised.

The speaker then proceeded to touch upon the features of the old scheme, which he said meant that the existing debentures would be watered, and the security would necessarily become depreciated. The proposal of the suspension of the sinking fnnd was thought by the debenture holders to be a very reasonable one, and so they had embodied it in the scheme which was before them that day.

The resolution, which he then moved, was seconded, and unanimously agreed to.

An extraordinary meeting of the shareholders of the company was held during the same afternoon, the Chairman of the company taking the chair, over a full board of directors.

In opening the meeting, the Chairman said his hearers would all be aware of the circumstances under which the company found it necessary to apply to the debenture holders for leave to suspend the sinking fund. That morning they had had a meeting of the first mortgage debenture holders, and he was pleased to say they had unanimously agreed to suspend that. He did not think it was necessary to say anything in regard to the disastrous state of affairs in Russia, or the reasons why the company was compelled to issue second debentures. Probably they were all aware that long ago the directors had an idea of obtaining leave from the first mortgage debenture holders to increase the amount of that issue, and get a suspension of the sinking fund on the debentures. Representations were made to them, however, by the debenture holders against the scheme, and eventually a committee of debenture holders was appointed, and as a result of a considerable number of conferences, the outcome had been that 400,000 second debentures were to be issued, 300,000 now, and the remaining 100,000 at some future date if necessary.

The question naturally arose, how was that to be done? They would naturally think that the terms of the issue were very onerous, and he had to admit that, but so far as Russia was concerned, that country had not been in a position to guarantee any great security for investment, and they thought that the present proposal was a fair one. After they had their meeting with the debenture holders at first, it certainly did appear improbable that the necessary support would be forthcoming for the original scheme, and so with a view to devising some other method of meeting the situation, the present course was determined upon. As a result of the new scheme, the company would be provided with cash which it was believed would be sufficient to place its finances upon a sound basis. He thought they had been very fortunate in getting the whole of the issue underwritten. Some might think that underwriting was scarcely necessary, but the responsibility for the directors to bring it before the shareholders without, was too great. The scheme required from the first mortgage debenture holders, the concession involved in the suspension of their sinking fund for four years. That would relieve the company from the necessity of finding over £150,000 in cash during that time. On the other hand, the committee of debenture holders stipulated, and the directors agreed, that the cash required should be found by an issue of second mortgage debentures, ranking after the outstanding balance of the first debentures, which was at the present time £376,000. The directors did their best to pass the first scheme, which meant the suspension of the sinking fund for five years and an increase in the first debentures; but they saw that there was practically no possibility of doing that, and therefore they felt bound to fall in with the decision of the committee, which was a very important and influential one.

He thought the directors were justified in recommending the shareholders to take up their proportion of the second debentures. Of course, when a £100 debenture was bought at £50, it meant that there was a large interest accruing every year. With regard to the future of the company, there was always a very great degree of uncertainty, especially in regard to anything connected with petroleum in Russia; but at the present time affairs in that country were in a very different state to what they were six weeks ago. The amount of oil which the company was producing was increasing, and the price was about 26 copecs per pood. Mr. Ofenheim, who had been connected with the petroleum industry for many years, had agreed to accept a seat on the board, and also Mr. Charles Lock, who was well known in London. He hoped that the intimate knowledge of the oil trade which these gentlemen possessed and their administrative capacity would prove most valuable to the company in the future. The object of the meeting was to pass a resolution to get the assent of the shareholders to increase the borrowing powers, and to give voting power to the Mercantile Trust, who were the trustees on behalf of the second debenture holders. He then moved a resolution to that effect.

This was seconded by Mr. J. H. Fox and carried.

The Chairman also moved the second resolution, which was seconded by Mr. Fox.

Mr. Knott expressed his disapproval of the proposal. He asked if the company ever intended to pay off the first debentures. The company appeared to be in as rotten a state as it could be, and he thought they ought to wind up. The whole thing had been a swindle all along.

Mr. George Sneath remarked that if the scheme had commended itself to the committee of debenture holders, and especially to its chairman, who was one of the astutest financiers in the City of London, he thought the shareholders had every reason to be satisfied with the arrangement. The company was not in as bad a state as the last speaker would make them believe.

The Chairman reminded Mr. Knott that the company had carried upwards of £500,000 gross profits since it commenced operations, and there was every reason now to believe that it would be put on a sound basis now.

The resolution was carried.

A separate meeting of the holders of the preference shares was also held, and a resolution was passed giving voting power to the Mercantile Trust.

PATENTS.

Applications for Patents and Patent Applications recently published relating to the Petroleum Industry.

Specially contributed by Messrs. EDWARD EVANS & Co., of 27, Chancery Lane, London, W.C., and 105, Colmore Row, Birmingham, Consulting Engineers, Chartered Patent Agents and Enrolled Patent Attorneys of the United States.

Applications Filed in Great Britain.

Improvements in Purifying Pitch Oils and other Ethereal Oils obtained by Destructive Distillation of Resinous Substances.—Albert Hesse, London. No. 7934 of 1905.

An Improved Hydraulic Press for Oleaginous Fruits.—Charles George Redfern, London. (Société L. Felix Fournier et Cie, France). No. 8549 of 1905.

Applications Published in Great Britain.

Improvement in Boring Tools.—William Fullard, Plainfield, New Jersey, U.S.A. No. 5947 of 1905.

This relates to a boring tool for use with excavating machines, comprising a rod having screw threads thereon, and a movable cap portion carrying a screw thread of increasing pitch, said screw thread being provided with pins in combination with a surrounding tube having an enlarged extension.

Improvements in Air Compressors for use in connection with Rock Drills and the like.—Henry Harris Lake, London (Ingersoll-Rand Co., of Manhattan, New York, U.S.A.).—No. 23994 of 1905.

This relates to rock drills, and consists in combination a tool, a cylinder, its piston, a pressor cylinder, its hollow piston, a closed crank-chamber in open communication with the interior of the piston, a port through the peripheral wall of the piston and a bridge port in the wall of the cylinder, arranged to co-act with each other, to open communication from the interior of the closed crank chamber through the piston to the interior of the pressor cylinder when the piston is at the limit of its movement in one direction.

Improvements in Rock Drills.—Henry John Cubitt Keymer, Gorleston-on-Sea, Great Yarmouth. No. 693 of 1906.

This relates to a rock drill, comprising in combination with a pair of boring tools, pawl and ratchet mechanism for rotating said tools intermittently, hammers striking said tools alternately, connections between the hammer actuating means and the ratchet mechanism whereby the percussive action and the rotating action take place alternately, and valve controlling means for operating said drills through the medium of compressed fluid or the like.

Improved Manufacture of Emulsions of Heavy Mineral Oils or the like.—Jarig Philippus van der Ploeg, Amsterdam, Holland. No. 7699 of 1905.

This relates to the manufacture of emulsions of heavy hydrocarbons or the like by mixing the hydrocarbons without heating and with or without the addition of a substance which will bring its specific gravity nearly the same as that of water with an alkaloidal base. an inorganic or organic alkaline salt or an alkaline base being added to keep the alkaloid compound alkaline.

AMERICAN PATENT GRANTED.

Crude Oil Burner.—Edwin Darby, Iowa City, Iowa.

An oil burner comprising a ring having a plurality of openings, a pan hinged to said ring and having a conical bottom, a hood having the air trunks integral therewith, the depending legs of said air trunks fitting in the openings in the ring, the horizontal members of said air trunks conveying at the centre of the hood, said hood having a central opening, said opening being surrounded by a depending collar, which collar tapers toward the apex of the conical bottom, an oil pipe leading into the air trunks at their conjunction or intersection, a water pipe passing through the top of the hood and coiled beneath the hood, the discharge end of said water pipe being connected to the oil pipe, and asbestos wicking arranged upon the conical-shaped bottom of the pan.

. . The Petroleum Deposits of Trinidad. . .

Interesting Lecture by Mr. Randolph Rust.

A highly interesting address was delivered at the West India committee rooms, London, E.C., on Thursday afternoon by Mr. Randolph Rust, of the Canadian Oil Exploration Co. of Trinidad, upon the future of that colony from the point of view of petroleum production. Sir Neville Lubbock presided, and in opening the meeting read a letter from Sir Henry M. Jackson, the Governor of Trinidad, who regretted that a severe attack of influenza prevented his attended the meeting.

Mr. Rust, in the course of his interesting address, gave a brief description of the island, pointing out its great importance to the Empire from a strategic point of view. At present the navy had to coal at various depôts along the Atlantic seaboard, but with the discovery of petroleum in Trinidad and its increasing use as a fuel for naval purposes, the importance of the discovery could scarcely be over-estimated. Moreover, with the completion of the Panama Canal in the near future, Trinidad would rise into great importance, lying as it does at one of the salient points of what will be the great trade routes of the future.

Mr. Rust then referred to his explorations in the forests of Trinidad during the past six years, resulting in his having discovered that enormous deposits of oil, estimated as underlying some 400 square miles of land, existed in practically the whole of the southern half of the island. His own personal observations and discoveries had been fully borne out by a close and careful geological survey, and also by experts and consulting engineers in the petroleum world, who had visited the deposits in question and reported most favourably thereon.

TRINIDAD'S FIRST OIL FIELD.
Photo kindly lent by Mr. R. Rust.

Up to date, the Canadian syndicate of which Mr. Rust is a member, had sunk some six wells, and those were situated several miles apart. In fact, one well was placed not far from the celebrated pitch lake at La Brea, 40 miles as the crow flies from the wells sunk at Guayaguayare, and the oil found, both in No. 1 well and that at Aripero estate, was undoubtedly derived from the same strata, proving beyond doubt that the oil sand existed in a direct line some 40 miles long and at almost similar depths. The quality of the oils found was excellent, most of those hitherto obtained having an asphaltic base, but in No. 3 well an oil containing no less than 32 per cent. of solid paraffin wax had been discovered. With regard to the calorific value of the oil, it was equal to 18·2. The crude oil contained a very large percentage of petrol, and also a very high percentage of illuminating oil. In one sample of crude oil obtained from a natural spring, no less than 72 per cent. of the same was illuminating oil of a very high character.

Mr. Rust then spoke upon the shipping facilities, due to the proximity of the oil deposits to the sea-shore; two of the wells, in fact, were drilled at high water mark, whilst at various points around the coast large quantities of oil were from time to time found floating on the surface of the sea, indicating that deposits of petroleum underlie the bed of the sea adjacent to the coastline.

Mr. Rust concluded by expressing his firm belief in the successful outcome of the work he had already done, and that in the near future Trinidad would be known not only for its sugar, cocoa and asphalt, but also for its petroleum and the birth of a new industry, which would immediately conduce to the welfare of the Colony and indirectly to the safety and welfare of the British Empire, as it was the only place on that side of the Atlantic where Great Britain owned any large deposit of petroleum that could be used in her Navy for fuel purposes.

Questions were then invited, and one gentleman enquired what was the present production.

In reply, Mr. Rust said that his Canadian partners, as soon as they struck oil in a well, preferred to remove the machinery to another spot, and keep the well capped. Their idea was to test the whole territory. He could tell them, however, that from No. 1 well he pumped over 300 barrels in six days with day pumping only.

In the course of a lengthy speech, Mr. McDonald, who dealt principally with the shale oil industry of Scotland, remarked that he had no hesitation that Trinidad would eventually become an immense source of revenue to the Empire.

Dr. Dvorkovitz said that without doubt the question of the development of Trinidad's resources were of great importance. Canada would, of course, supply a great deal of the fuel oil for the future, but owing to the distance the fields were inland, England would have to look elsewhere, and so in case of war the Trinidad oil fields would be more important than any others in the world. He thought they should all advocate that English capital should go to Trinidad, but up to the present the English capitalist seemed to prefer its going anywhere but to his own colonies.

Professor Carmody said that so far as the quality of the oil was concerned, they could take it from him that it was equal to if not superior to that found in any part of the world. From what he had seen and studied, he could only come to the conclusion that there were vast deposits of oil underlying large areas of that Colony.

At this stage of the meeting, Sir Francis Fleming took the chair, and after the discussion had been continued for some time, hearty votes of thanks passed to Mr. Rust and the Chairman, closed the meeting.

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THE SPECIFIC GRAVITIES OF RUSSIAN CRUDE OIL AND ITS PRODUCTS AT VARIOUS TEMPERATURES.

By M. P. KAZANKIN.

A most interesting paper upon the above subject was recently read before the members of the Russian Imperial Technical Society at St. Petersburg by Mr. M. P. Kazankin.

At the outset he explained that in the instructions issued to the Russian Government inspectors for the examination of crude petroleum or its products, the general rule for ascertaining the specific gravity was either by a Westphal balance or by a hydrometer but in practice the use of the former was not always possible, for it generally required a great deal of time to perform the operation.

As is well known, crude oil and the products received from the same vary according to their country of origin, for they are of different chemical and physical composition; for example, we have the American and Russian lubricating oils, the Baku and Grosny crude, etc. A special table has been adopted by the German Technical Committee for the purpose of ascertaining the specific gravities of American and Russian oils, and it has been found that the necessary correction for various temperatures for Russian and American products differs in the fourth decimal.

In Russia, however, there is a special table prepared in accordance with Professor Mendeleieff, but as this was based upon investigations of products of uncertain origin, it has now been decided to prepare new tables to be based upon an investigation of products whose place of origin is absolutely certain.

The apparatus which the author has used for the purpose of ascertaining the exact specific gravity at a fixed temperature, consists of a picnometer, or as it is more commonly called a specific gravity bottle, with a capacity of 50-52 cubic centimetres, and with an expansion above the neck of the flask. The balances used for the experiments have been made by the firm of Nemetz, of Vienna, and have a tare of 100 grammes, and having a permanent sensitiveness of 0·0001 grammes. After being filled up with the necessary crude oil or its products, the specific gravity bottle was placed in a water bath, the temperature of which has been regulated in such a manner that it could be maintained for any length of time without varying 0·1 of a degree.

The materials used for the purpose of the investigation have been supplied by Messrs. Nobel Bros., and started from light benzine to the heaviest lubricating oil, being prepared from the crude of Baku. The Vladicaucasian Railway Co. supplied the Grosny crude and its products, including light benzine, lubricants, and kerosene. In all, 22 different samples of oil were investigated, and their specific gravities ascertained at different degrees, namely, at 0°, 8°, 15°, 22°, 30°, and 40° Celcius.

The necessary correction which now has to be made for every degree C. of the various products investigated is as under:—

Oil.	Specific gravity.	Correction per degree C.
Baku petroleum ether	0·64483	0·000949
Schibaieff benzine	0·70947	0·000905
Grosny benzine	0·71035	0·000890
Nobel benzine	0·71713	0·000898
Heavy benzine	0·75585	0·000816
Grosny light kerosene	0·80041	0·000749
Grosny heavy kerosene ..	0·81300	0·000744
Baku kerosene	0·82364	0·000731
,, ,, (second sample).	0·82394	0·000733
Schibaieff kerosene	0·82436	0·000737
,, heavy benzine (astraline)	0·83106	0·000723
Nobel distillate	0·85084	0·000704
Grosny crude	0·85640	0·000706
Schibaieff pyro-naft	0·85960	0·000684
Nobel pyro-naft	0·85991	0·000682
Solar oil	0·86960	0·000680
Baku crude oil	0·87262	0·000673
Nobel distillate	0·87927	0·000664
,, solar oil	0·88084	0·000662
,, distillate	0·89156	0·000654
,, spindle oil	0·89895	0·000635
,, lubricating oil	0·90975	0·000632

The above corrections will be welcomed by not only professional men but by the trade, as this is the first time that the table has been revised since it was first prepared by Professor Mendeleieff 25 years ago.

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TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 26th April, 1906, as follows:—

Since our last report of 11th inst., when tin closed at £175 10s., the price has steadily advanced, and to-day stands at £182 for spot. In the meantime, although there has been a more active enquiry for tin plates, there has been no material improvement in prices. Consequently matters have reached a climax, many makers refusing to quote on the ground that the prices offering do not cover cost, and the stoppage of a large number of mills until prices improve, is imminent. We make prices of oil sizes to-day as below, according to position:—

IC	18¾ × 14	124 sheets	110 lbs.	13/- to 13/3	per box.
IC	19¼ × 14	120 ,,	110 ,,	13/- to 13/3	,,
IC	20 × 10	225 ,,	156 ,,	18/3 to 18/6	,,

F.o.b. Wales. Tin lining and iron hooping extra.

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PETROLEUM IMPORTS INTO JAPAN IN 1905.

The imports of petroleum into Japan in 1905, compared to 1904, were as follows:—

	1905.		1904.	
	Quantity in gals.	Value in yen.	Quantity in gals.	Value in yen.
Total imports ..	58,703,309	12,061,261	81,671,801	18,201,490
Of which—				
From Dutch India	8,882,832	1,800,996	11,973,307	2,450,408
,, Russia ..	13,002,631	2,620,195	19,987,340	4,385,478
,, U.S	36,817,346	7,639,964	48,811,014	11,152,271
,, Italy	—	—	900,140	213,333

The Galician Petroleum Association in 1905.

Notwithstanding the existence of the "Petrolea" crude oil combine and the refiners' cartel, the year 1905 was not particularly profitable for the crude oil producers of Galicia. The main causes are the continuous over-production of crude oil in Galicia, and the severe competition which Galician oil has been meeting with on the foreign markets, which competition only abated slightly towards the end of the year, after the Baku catastrophe. The heavy cost of drilling wells at Boryslaw has contributed to the rather unsatisfactory financial results of operations in the petroleum industry.

Under the circumstances, the efforts of the Galician Petroleum Association in 1905 were directed mainly toward finding a solution of the over-production problem. When news of the Baku disaster arrived, a meeting of petroleum producers was held at Lemberg, and delegates were despatched to offer to the Russian Government Galician crude oil to make good the shortage in liquid fuel. The delegates elicited from the Russian Minister of Finance the promise to admit Galician crude duty free in the event of a liquid fuel famine setting in in Russia. Unfortunately the strikes and political disorders brought about a disorganisation of Russian trade and industry, and a consequent shrinkage in the consumption of fuel, and the foreign oil was for the moment not required. The Galician producers, however, expect that in the coming autumn the liquid fuel crisis may again become acute in Russia, and they are therefore making preparations to be able to satisfy promptly any demand for fuel oil which may come from Russia. In this connection steps have been taken by the Association to obtain from the State railways a reduced rate for carrying oil to the Russian frontier.

Another important question, in the solution of which the association took a prominent part, is the reform of the petroleum land law, which will soon be an accomplished fact. As the law now stands in Galicia, and by the decision recently announced by the supreme court, petroleum leases and mining rights are not recognised as property, and cannot be entered in the land registry. There is therefore insufficient security for those who invest their capital in petroleum lands other than freehold. The amended law provides that the proprietor of land can, without any complicated formalities, by a mere declaration before a notary, separate from the ownership of the land the petroleum mining rights which are thus constituted into a separate property to be sold by the owner of the land for ever or any length of time. Provision is also made for proper recognition of royalty rights.

The minimum area of a petroleum plot is to be 8,000 square metres. The new law also prescribes certain qualifications for managers of petroleum fields and ozokerite mines, it regulates the formation of trade unions, making it dependent on the consent of the Government. This bill will shortly be considered by the Galician Diet, and when passed it will be submitted to the Central Government for sanction.

The Minister of Justice of the Central Government on his part has likewise drafted a bill for petroleum land law reform, which provides that the Government in three years after a plot of land has been provisionally declared petroliferous, shall have the right, upon the declaration of the Government mining authorities, based on expert opinion, that it is petroliferous, and enter it on the petroleum land register, or should the Government mining engineers declare it non-petroliferous it will be taken out of the register. This clause has aroused great apprehension among petroleum people, as it threatens sometimes on insufficient grounds to discredit oil lands and forcibly deprive people of their property and the money invested therein. It is hoped that by the efforts of petroleum people this clause will not be embodied in the law.

Among the other steps which the association have taken or co-operated in for the protection and furtherance of the petroleum industry the following may be mentioned:—

The Ministry of Agriculture in April, 1905, issued a circular directing that the work of the oil fields should be carried on in ten-hour shifts. This would have involved the stoppage of work for two hours between the shifts. The Association protested and obtained from the Minister a modification of this order, which, while maintaining the rule that no workman shall work more than ten hours at a stretch, obviates the entire cessation of work between shifts.

The association has caused the Government to consider steps to prevent the sale by dealers of mixtures of illuminating oil and solar oil or benzine, and sold as pure illuminating oil, which was most damaging to the petroleum trade as a whole.

On the question of railway rates the association has been instrumental in obtaining from the railways reduced tariffs for the export of oil to France and Germany. In the latter case the reduction amounts to 50 per cent.

There were also a number of other more or less important questions affecting the petroleum industry which were included in the sphere of activity by the association in 1905. The association has representatives on the following Government and public institutions:—the State Railway Council, Advisory Council on Agriculture and Industry, Advisory Council on Taxation of Mineral Oils, the Lemberg Chamber of Commerce, Income Tax Assessment Committee, etc., where they watch over the interests of the petroleum industry. The Association has further resolved to take an active part in the next elections for the Diet and the Reichsrath, to ensure the return of candidates to represent the petroleum industry.

With the growth of the petroleum industry grows also the Petroleum Association. At present the association has 138 members, of which 45 are firms engaged in or connected with the petroleum industry.

MISCELLANEA.

THE PETROLEUM TRADE OF BRISTOL.

In future the Bristol petroleum import trade is to be curtailed as much as possible at Portishead Dock, and encouraged in the vicinity of Avonmouth. There are good reasons for this departure, which will make for increased trade. Application has now been made for leave to pump petroleum at a river jetty, outside Avonmouth Dock, from steamers to storage tanks close at hand, and the proposal meets with approval.

It is felt that the use of the Avon jetty will in no way prejudice other dock interests, whilst it will greatly facilitate business. At the same time all precautionary measures are to be taken for minimising the risk of leakage or accident, and there is guaranteed a minimum payment in respect of dues on the importing vessels and their cargoes, which ensures the port suffering no loss of revenue from the changes that are to be brought into operation. Indeed, with the growing requirements for motor traffic, and the extended area of distribution now served by the port, the traffic promises to increase rapidly.

PRODUCTION OF CRUDE OIL IN GALICIA IN FEBRUARY.

The following are the figures of the crude oil production at the Galician oil fields in February :—

	Production.	Stock on Feb. 28th.
West Galicia—		
Potok	1,374	6,173
Rogi	1,647	13,215
Rowne	115	234
Tarnawa—Wielopole—Zagorz ..	2,344	7,555
Krosno	2,694	10,050
Other West Galician fields ..	2,985	14,118
East Galicia—		
Boryslaw—Tustanowice	37,559	404,644
Schodnica	4,127	32,029
Urycz	1,226	19,000
Mraznica	140	1,800
Other East Galician fields	1,080	310
Total	55,291	509,128

The quantity of oil used at the wells and the loss in February amounted to 2,390 tons, of which 1,600 tons falls to Boryslaw and Tustanowice. The total stocks shew a decline during the month by 2,000 tons, whilst at Boryslaw and Tustanowice they remain absolutely unchanged.

THE USE OF OIL IN STORMS.

A measure has recently been introduced before the American legislature, which is designed to thoroughly test the theory that oil may be used to quiet the waters about vessels during storms. Representative Jones, who has introduced the measure, is satisfied that the project is entirely feasible and thinks that the use of oil for this purpose will have an important effect upon the production and utilisation of crude petroleum. During the past several years Lieut. Wycoff, U.S. Navy, has conducted a series of experiments in the use of oil to reduce the violence of heavy seas. The most successful results have followed the use of a sack of a certain texture holding from 10 to 20 gallons of oil, which is thrown overboard, and fastened to the vessel by a line of convenient length. Such a device distributes the oil slowly, and it is claimed has a tendency to quiet the waves for several hours. The quantity of oil used bears a certain relation to the size of the vessel to be protected, two gallons being said to be sufficient for a lifeboat.

THE INDIAN BUDGET AND PETROLEUM.

Reference was made in the Indian Budget which was presented at the Viceroy's Council which met on March 21st to the Indian petroleum trade. In the accounts it stated that the falling-off in the duty on petroleum was £73,300, and that was due to the stoppage of the imports of Russian oil after the destruction of the wells at Baku. Its place was taken by Burma oil, which paid no duty. In connection with the estimates for the present year, it is pointed out that it would not be safe to reckon upon any increase in the receipts from petroleum, an industry in which duty free Burma oil is claiming a rapidly growing share.

AMERICA'S EXPORTS OF PARAFFIN WAX DURING FEBRUARY.

During February, America exported the following quantities of paraffin wax to the various countries named, the figures for the corresponding period of last year being placed alongside, in pounds :—

Exported to—	1906.	1905.
United Kingdom	9,539,429	6,526,472
Belgium	13,793	82,811
France	143,937	112,575
Germany..	942,697	682,730
Italy	1,085,953	595,524
Netherlands	650,767	418,561
Other European Countries	854,140	554,341
British North America	200	1,100
Cent. America and British Honduras	110,254	68,785
Mexico	1,883,205	581,262
West Indies and Bermuda	300	—
Brazil	30,795	23,159
Chili	—	—
Other South American Countries ..	12,000	20,000
Japan	563,499	154,734
British Australasia	253,850	—
Other Asia and Oceanica	—	34,503
British Africa	500	—
Other African Countries	126,265	—
Total pounds	16,211,584	9,856,557

MARCH PRODUCTION OF DUTCH-INDIAN COMPANIES.

The production of refined oil by the Royal Dutch Co., which includes the output of the Sumatra-Palembang and the Moeara Enim Companies, in March amounted to 871,000 units. The output in February was 884,000 units, and in January 785,500 units. The Dordtsche Petroleum Co., operating in Java, in March had an output of 162,500 cases of refined oil. The figures for February and January were 144,000 and 168,400 cases respectively. The production of refined oil by the Panolan Co. in March amounted to 48,466 cases, against 34,376 cases in February, and 51,224 cases in January, while during the month the Sumatra-Palembang produced 40,300 units of refined oil. In February their output was 36,000 units, and in January 41,000 units.

THE ALBERTA OIL FIELD.

HISTORY OF THE NEW CANADIAN TERRITORY.

LATEST DETAILS OF DEVELOPMENTS.

The Alberta field seems destined to play a prominent part in connection with the production of oil on a large scale. In spite of the meagre information which has reached the outside world in the past concerning operations in the territory, it is evident from the latest despatch which has been forwarded to us that developments are being pushed forward very rapidly, especially in view of the fact that the oil is of a particularly light character. The new oil fields are situated in the extreme south-western section of Alberta within five miles of the international boundary, and some 45 miles south-west of Pincher Creek, a station on the main line of the Canadian Pacific Railway. The valley in which the oil discoveries lie is described by geologists as an enormous crevice caused by volcanic eruption crosscutting the formation of the Rocky mountains and forming a huge basin, or vacuum, into which the oil has been seeping for centuries from the coal deposits in the north, forming a vast lake underlying the rock formation at a depth of a little over 1,000 feet. The country is mountainous, and in most cases the valleys are narrow and heavily timbered; on the mountain sides the formation is exposed, shewing a gently folded strata, or anticlinals, which can be traced for miles. Where a break in the formation occurs a seepage can invariably be found A large number of these seepages exist where the oil can be dipped up, and all along the creeks oil indications are plentiful.

Several years ago a farmer named William Aldrich used to gather the oil in barrels from surface seepages and sell it to his neighbours, who used it for lighting and lubricating purposes. In this way Aldrich sometimes gathered up as much as 10 and 12 barrels of oil in a day.

In 1890, Mr. John Lineham, a wealthy lumber manufacturer, of Okotoks, Alberta, had his attention drawn to the fact of this farmer obtaining oil in such large quantities and in such a crude way that he concluded to investigate. He went up the pass, and looked the whole district over. After seeing the conditions existing in the pass, he came to the conclusion that there were large quantities of oil in the district. What was required was a man of action to develop the resources. The nearest waggon road was 17 miles away, and to construct a road that distance, through a mountainous country, was a task that few would care to undertake. Mr. Lineham proved to be the man of action required for such an occasion. He sent east for an oil expert to report upon the district, and this report was so flattering that Mr. Lineham at once formed a company of his friends, which he called the Rocky Mountain Development Co., and purchased the tract of oil-producing land from the Government.

Operations were commenced, and in 1902, at a depth of 1,020 feet, the company struck a well which flowed 300 barrels a day. This well was immediately plugged and capped, and the strike kept secret. In fact, the company thought it was wise to conceal the conditions as far as possible, being positive they had struck an immense oil territory. They kept their operations as quiet as possible and set about securing all the probable oil-producing land in the district. Owing to the extreme difficulty of having this land surveyed, on account of the roughness of the country, the fact that the surveyors had to go to the international boundary monuments to get their bearings to run the lines, and the delay in obtaining a title from the Dominion Government, Canadians were unaware until months afterward that their country had again demonstrated its wonderful wealth this time in the production of oil. Roads had to be built, machinery brought in, numerous buildings and a refinery erected, bridges built over the mountain streams, and it was not until June, 1905, that the public had the slightest inkling that anything out of the ordinary was being carried on amid the wildness of the mountain passes of the Rocky Mountains. The company now has a large force of men working night and day and up-to-date machinery has been installed, including three full rigs, one of which will bore a 12-inch hole to a depth of 3, 00 feet if necessary.

The great wealth surrounding the prosperous little new town of Oil City has attracted great attention, and already the Canadian Pacific and Great Northern Railways are completing surveys to commence the construction of a line.

As an instance of the great wealth of the oil fields is the fact that W. S. Darrow, of Chicago, a representative of the Standard Oil Co , has spent several weeks in this portion of Alberta looking over the prospects, and he admitted before returning to Chicago that the oil prospects of Alberta could not be better; in fact he described them as being phenomenal.

The effect of this great discovery of oil will revolutionise the industries of Canada. The Canadian Government allows a bounty of 1 1-2c. on each gallon of oil produced at home, and added to that the Alberta oil is of such a quality that it can be refined for from 45c. to 50c. per barrel cheaper than any other mineral oil known to exist.

The process of refining adopted by the Rocky Mountain Development Co. does away with the use of chemicals, and consists of two distillations instead of three, with the result there is an increased yield of at least 20 per cent. in all products which are of a purer quality by this process than by any other. The simplicity of distilling the oil by one distillation is another economical invention, added to an increase of one-fifth of all products, will permit profits to be reached by the Rocky Mountain Development Co. hitherto undreamed of in the oil trade. The honour of the introduction of this process of refining belongs to L. D. Kean, of Winnipeg, the general agent of the company, who secured the formula from Dr. McAlpine, of London.

Throughout the province of Alberta, along the slope of the Rocky Mountains from the international boundary as far north as civilisation has yet advanced, the sole topic of conversation is oil. The inhabitants of that section of Canada believe their province will become the greatest oil producer in the world when it has been properly explored and developed.

Mr. J. S. Williams, an oil expert from Summerlands, Cal., who has inspected the district, has stated that he believes a huge underground oil lake exists along the eastern slope of the Rocky Mountains, and his theory is borne out by the striking gushers of oil in various parts of Western Alberta.

THE PETROLEUM DEPOSITS IN HUNGARY.

BY HEINRICH WALTER.

It must be admitted that the Hungarian Government is making great sacrifices for the development of mining, and particularly of the petroleum industry, and although up to the present time the subsidies granted have not achieved any results, it is hoped that the perseverance displayed will shortly be rewarded with success.

At Sosmezo, boring will shortly commence, and the writer, who knows this locality as the best spot for petroleum exploration in Hungary, is firmly convinced that oil will be found. Geologically, Sosmezo belongs to the Roumanian deposits.

At Zboro borings have already commenced, and if the proper site for boring has been selected, there is a very good prospect of success. There, particular care has to be exercised in starting borings, as the choice of sites is not large. The writer has for ten years been carrying out a geological investigation of the Korosmezo district, without any commission from anyone, but merely for private information. At first he was attracted only by the land on the Lopuszanka rivulet, where he encountered the well-known Galician geological conditions of the eocene formation. On the other hand, the deposits on the Theiss and on the Stebna rivulet did not inspire him with any confidence, as in both places he found the lower oligocene formations, which in Galicia were at that time considered as of lesser importance.

Since then recent investigations have proved paleontologically, and therefore beyond doubt, that the enormously rich oil fields at Boryslaw, Tarnawa-Dolna, Wielopole, Zagorz, and Polana-Rayskie belong to one and the same horizon of the lower oligocene. As a consequence, his views on the Korosmezo deposits have changed in a favourable direction. The geological conditions of this deposit are the following :—

The natural cuttings in the rivers Theiss and Stebna reveal plainly the layers of the oligocene, whilst the explorations on the Lopuszanka river and the railway cuttings afford a view into the upper and partly also the middle or productive eocene formation.

Proceeding from the town up the Theiss, we at first note on the banks oligocene strata sloping southwards up to the end of the village, where a boring has been started. This borehole was well placed, and at a depth of 80 metres is said to have yielded oil, but was nevertheless shut down. About 200 metres further up we notice in the bank the lower oligocene formation. The sandstones are strongly impregnated with oil.

The saddle of strata is here sufficiently revealed. On the northern side of the saddle a borehole was started likewise which struck some oil at a depth of 120 metres, but this well was also shut down.

On the Stebna rivulet we see at first only coffee-brown menilite shales, and 200 metres higher we come to oligocene sandstones alternating with grey clays. Here a shaft was dug to 30 metres, which yielded considerable quantities of a heavy oil, but a flood filled it in. The author saw strong gases and traces of oil on the top of the filled in well.

The oil obtained on the Theiss as well as on the Stebna is dark brown, resinous, low-grade, and closely resembles the oil from Tarnawa-Dolna, and generally the oligocene oils of Galicia.

Further east along the road going towards Tablinica, are to be seen only the upper oligocene, or so-called Magura sandstones, which are sterile.

The author considers the land on the river Theiss and on the Stebna rivulet as excellent spots for the exploitation of petroleum in the oligocene formations.

In order to acquaint ourselves with the eocene formation, we must study the Lopuszanka rivulet. The strata there are also well revealed. There are there very strong oil outcrops, and there are grey clays with narrow streaks of sandstone, resembling those observed at Pasieczna. The strata slope steadily to the south-west, and form a saddle at a spot opposite the residence of one Nikola Maniaczuk. On the saddle, thicker sandstones appear. From this saddle onwards the slope takes a north-easterly direction. Traces of oil and ozokerite are observed here. The oil is dark brown and green fluid, resembling Pasieczna oil. Lower down, by the railway station, are to be observed reddish blue clays, which seem to form the upper part of the eocene formation, and when investigated for their microfauna, they proved sterile, which accords with the experience gained in Galicia. The microfauna on the Lopuszanka river points to a higher level of the productive eocene formation, and we must be prepared for boring to a considerable depth.

On the Theiss and Stebna rivers the oil should be found at a comparatively slight depth.

Unfortunately, owing to unfavourable weather conditions, the author being unable to more thoroughly investigate this highly interesting locality, but what he has succeeded in observing is sufficient to mark out Korosmezo as one of the best petroliferous territories in Hungary.

◆

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended April 14th was 302,000 poods, or 4,869 tons; and for the week ended April 21st was 4,562 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended April 15th was 302,000 poods, or 4,869 tons; and for the week ended April 22nd was 4,869 tons.

Spies Petroleum Co., Ltd.—The output for the week ended April 15th was 111,915 poods, or 1,805 tons. There was one day's stoppage on account of holidays. The output for the week ended April 22nd was 110,610 poods, or 1,784 tons.

The European Petroleum Co., Ltd.—The production for the week ended April 15th, 1906, was 101,498 poods, or 1,636 tons; and for the week ended April 22nd was 101,330 poods, or 1,634 tons.

◆

The Belgo-American Oil Co.—Considerable damage has been done to oil property in Wyoming during the early part of the present month owing to snow melting in the foothills and a heavy fall of moisture. The Belgo-American Oil Co. is reported to be the principal loser, its oil receiver, situated on the Little Popo Agie River, having been completely destroyed, as well as 100,000 barrels of oil in storage. The same company has sustained other losses.

IMPROVEMENTS RELATING TO ROCK DRILLS.

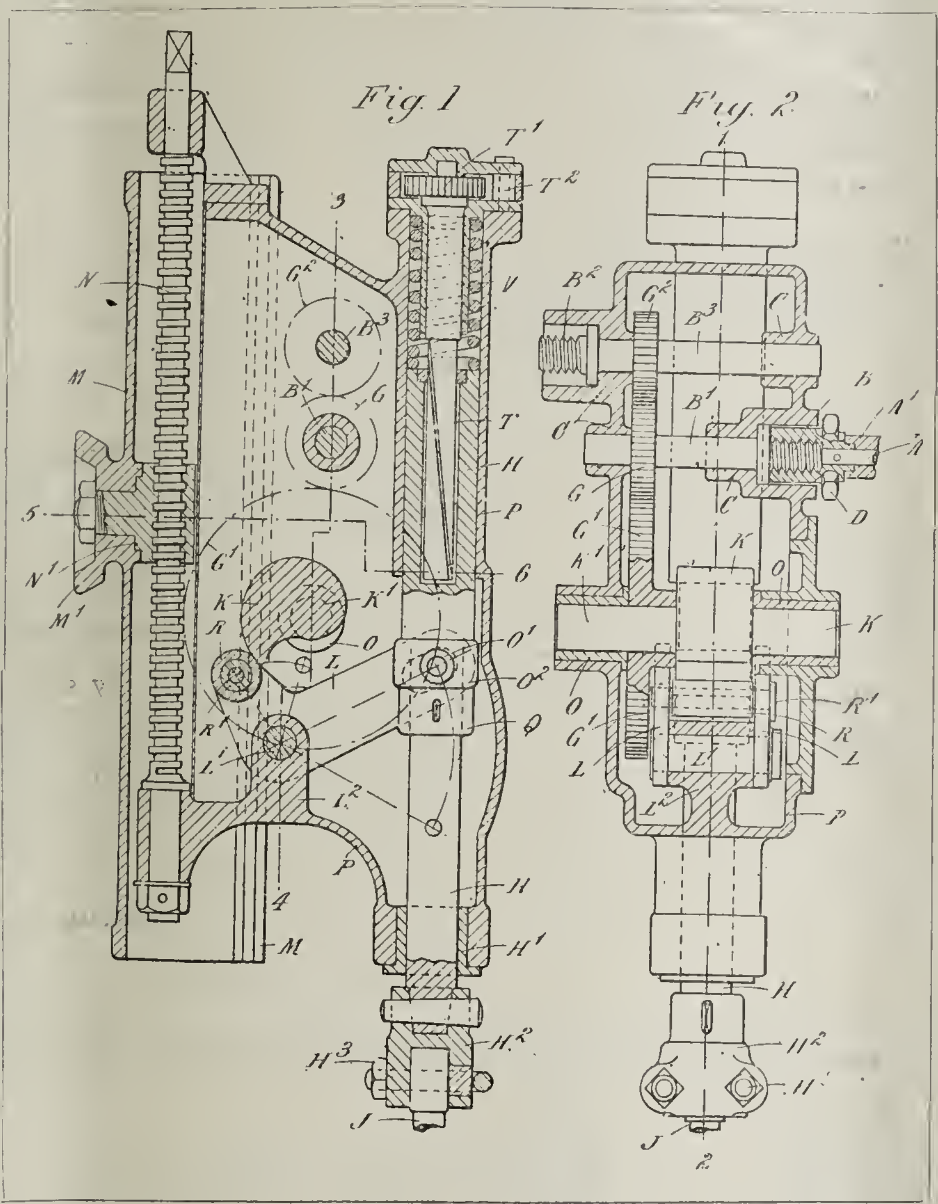
A patent has recently been granted to Mr. Thomas Warsop Coniston Lancashire, engineer, for an invention which relates to improvements in rock drills or other percussion tools. The invention consists of an improved method of actuating rock drills or other percussion tools by means of petrol or other motive power. The power is conveyed from the said motor by means of a flexible shaft, to one end of which is attached a pinion wheel, this wheel being carried from the frame of the drill; in gear with this pinion wheel is a spur wheel which is attached to a shaft carrying a cam or crank, the action of the cam or crank being to force back a spindle against a spring situated behind the spindle. The said spindle is fitted with suitable collars by which the cam or crank actuates the spindle by means of suitable levers or connecting rods.

At one or more points of the revolution of the cam or crank, the spindle is released, and forced forward by the compressed spring. The front of the spindle is fitted with a suitable socket for carrying the jumper or other tool for boring holes in rock or performing other work; and at the other is fitted with rotating gear for gradually rotating the spindle in the usual manner.

The whole arrangement described above is covered in or protected where necessary, and is carried by the slides of a cradle or carriage fitted with feeding screw, handle and the like—all carried by a tripod or stretcher bar in the usual manner.

In these figures A is one end of the flexible shaft for driving the drill. the other end of same being attached to a shaft actuated by one or more petrol, electric, or other motor or motors, placed at a convenient distance from the drill. A^1 is the covering of the flexible driving shaft, D is the nut attached to the covering for screwing the flexible shaft on the screwed end B of shaft B^1, which turns in bearings C C carried by the drill casing P. Attached to shaft B^1 is the pinion wheel G gearing with spur wheel G^1 fixed on or in one piece with the cam shaft K^1, which revolves in bearings O, O carried by the drill casing P. K is the cam, preferably formed in one piece with the shaft K^1; L L are two bell crank levers pivotted by pin L^1 on each side of bearing L^2 attached to casing P. R is a roller actuated by the cam K, and turning on pin R^1 carried at one end of levers L L; the other ends of which engage with studs O^1 attached to collar O^2, which is capable of turning on the drill spindle H, and is held in place thereon by the sleeve Q cottered to same. The spindle H reciprocates at its lower end in a socket H^1, and at its upper end in a chamber formed in the casing P. This chamber encloses the spring V—which forces down the spindle H after compression—and also carries the ratchet wheel T^1, and twisted bar T, which—by means of pawl T^2—rotates the spindle H in the usual manner.

H^2 is a socket cottered to spindle H for carrying the jumper or other tool J, which is fixed therein by the clipping bolt and die H^3.



As sometimes it is required to drive the drill from the opposite side or left hand side of the machine—other than where the flexible driving shaft A is shewn attached in Fig. 1—I have an upper or secondary shaft B^3 with screwed end B^2 at the left hand side of the drill, to which the flexible driving shaft A can be attached. The shaft B^3 is fitted with a pinion wheel G^2 which gears into the pinion wheel G—all in such a manner that the cam shaft K^1 and cam K revolve in the same direction, if the flexible driving shaft A is attached to either side of the drill.

The mechanism enclosed in casing P slides in grooves formed in each side of the carriage or cradle M, which is formed with a trunnion M^1 for fixing to a tripod-stand, bar or the like in the usual manner. N is the feeding screw turning in bearings attached to casing P and turning in nut N^1 attached to the carriage M, for feeding forward the drill as the hole is being bored in the rock or the like.

The use of a rotating cam K, cam shaft K^1, and the other part herein shewn and described for rotating the spindle H and jumper J, are similar to those described in my patent specification No. 24,523, dated 12th November, 1904; but this present invention has reference to improvements in the means of driving same by a flexible driving shaft A, which is driven by one or more motors outside the drill, and at any convenient distance therefrom as before described.

◆

The KERN RIVER FIELD of CALIFORNIA.

The United States Geological Survey has recently made a detailed survey of the oil district north of the city of Bakersfield, Cal., known as the Kern oil field.

The oil resources of this region have already been extensively developed, and the numerous oil companies operating in the field have had full need of the enormous tankage system which has been installed. A number of the tanks have a capacity of a million and a-half barrels each. The topographic features of these oil fields indicate, too, that further development may be expected to the north, toward Paso Creek. Lying as it does in the foothills of the Sierra Nevadas, this district has one thing which is an absolute necessity of the industry—that is, an abundant water supply. A power plant on Kern River supplies electricity to Bakersfield and the adjacent country, and also furnishes power to Los Angeles. As Los Angeles is about 170 miles distant from the plant, this necessitates one of the longest power lines in the country.

Bakersfield stands at the junction of two transcontinental railroads, the Southern Pacific and the Santa Fe. These afford ample facilities for shipping the crude oil, large quantities of which are used as fuel by the railroads and manufacturers of California.

A pipe line extends from Bakersfield to San Francisco, a distance of about 300 miles, and a considerable portion of the oil is pumped through these pipes. It is necessary, to maintain pumping plants about six miles apart.

South-west of Bakersfield lies a very fertile country, which is under irrigation and supports a population of many thousands.

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{11}{16}$-$\frac{13}{16}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	3/9-4/3
,, ,, ..	£650,000 $5\frac{1}{2}$% Pref.	£1	7/6-8/0
Bibi-Eybat Petroleum Co. ..			10/0-11/0
Californian Oilfields	£250,000 Ord.	£1	$5\frac{5}{8}$-$5\frac{7}{8}$ C.D.
European Petroleum.. ..	£550,000 Pref.	£1	3/0-4/0
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	88-93
Russian Pet. & Liquid Fuel ..	£500,000 $6\frac{1}{2}$% Pref.	£1	12/6-13/6
,, ,, ...	£600,000 Ord.	£1	12/3-13/3
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	$3\frac{5}{8}$-$3\frac{7}{8}$
,, ,, ...	£575,000 Ord.	£1	9/0-10/0
Shell Transport & Trading ..	£2,000,000	£1	25/9-26/9
,, ,, ,, ..	£1,000,000 Pref.	£10	$9\frac{1}{4}$-$9\frac{1}{2}$
Spies Petroleum Company ..	£312,500	10s.	7/9-8/3

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on April 23rd.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	630	633
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	4,000	4,100
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	162	165
Neft Co.	250	—	—
Nobel Bros.	5,000	9,300	9,400
,, ,, ...	250	—	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

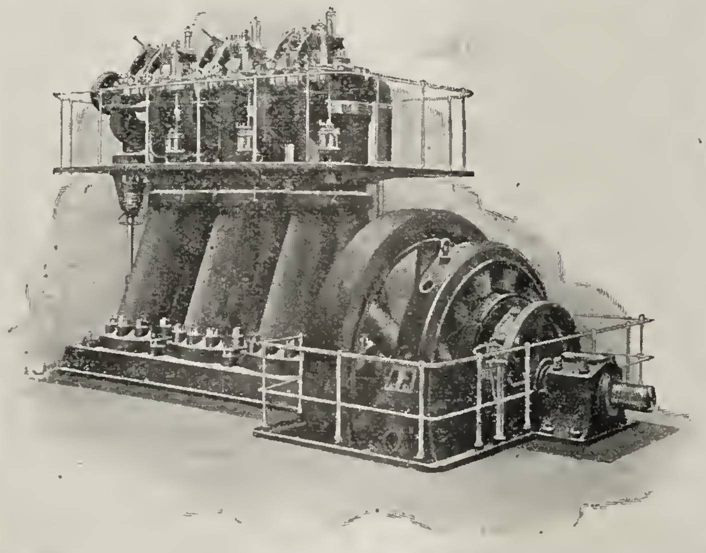
SCOTCH COMPANIES.

Supplied by Messrs. MACLEAN AND HENDERSON, STIRLING.

Company.	Capital Paid Up.	Value of Share.	Latest Prices
Broxburn Oil Co., Ltd., Ord. $8\frac{1}{2}$ pd	£199,750	£10	18
Do. 6% Cum. Pref. ..	£100,000	£10	$12\frac{5}{8}$
Burmah Oil, Ord.	£1,100,000	£1	48s. 6d.
Do. Pref.	£250 000	£1	26s. 0d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	$8\frac{3}{8}$
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	$18\frac{3}{4}$
Do. New (£8 10s. pd.)	£131,750	£10	$17\frac{1}{4}$
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	90s. 0d.
Do. 6% Cum. Pref.	£100,000	£10	$12\frac{15}{16}$
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	27s. 0d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	69s. 0d.
Do. "B" Deb...	£150,000	£100	$152\frac{1}{2}$

DUTCH COMPANIES.

Company.	Quotations April 25th.	Quotations April 4th.	Florins.
Arnhemsche Petroleum Mij. ..	77	80	1,000
Aurora ,, ,, (Deb. 5%)	$90\frac{3}{4}$	$90\frac{3}{4}$	—
Campina Poiana Mij...	35	35	—
Dordtsche Petroleum Mij. (Pref.) ..	126	122	500
,, ,, ,, (Deb. $4\frac{1}{2}$%)	$102\frac{3}{4}$	$102\frac{3}{4}$	1,000
Elzasser Petroleum Mij.	$2\frac{7}{16}$	$2\frac{1}{4}$	1,000
Gaboes ,, ,, ...	$19\frac{3}{4}$	$19\frac{3}{4}$	—
Holl. Rumeensche Petroleum Mij...	$32\frac{1}{2}$–$33\frac{1}{2}$	26-$28\frac{1}{2}$	1,000
Int. Rum. Pet. Mij.	$88\frac{3}{8}$	$88\frac{3}{4}$	500
Java Petroleum Mij. (Ord.) ..	30	30	1,000
,, ,, ,, (Pref.) ..	42	$42\frac{3}{4}$	—
Koninklyke Nederl. Pet. Mij. Shares	$479\frac{1}{2}$–$481\frac{1}{2}$	480–487	250-1,000
,, ,, Share certificates	480	478–482	1,000
Mœara Enim Petroleum Mij. ..	115	$114\frac{1}{2}$–115	100
,, ,, 1-1,000 Oblig. 5	102	102	250-1,000
"Moesi Ilir" Petroleum Mij. ..	$34\frac{5}{8}$	$34\frac{7}{8}$	—
Nederl.-Rumeensche Petroleum Mij.	17	$17\frac{1}{2}$	—
Nieuwe Ned. Petroleum Mij. And...	$55\frac{1}{4}$	$55\frac{1}{4}$	1,000
Oliebronnen in Hannover Mij. ..	173	170	—
,, ,, (Deb. 5 %).	$100\frac{1}{2}$	$100\frac{1}{2}$	—
Panolan Maatschappij Cert. ..	340	340	—
Perlak Petrol. Mij. (6 % cum. pr. A.) ..	$123\frac{3}{4}$	$143\frac{7}{8}$	1,000
,, ,, (Common) ..	$99\frac{1}{4}$	97 x.d.	—
Sumatra-Palembang Petroleum Mij	62	61	500
Zuid Perlak Petrol. Mij. (Pref.) ..	$88\frac{1}{4}$	$84\frac{1}{2}$	—



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Saturday, April 28th, 1906.

WHAT RUSSIA LACKS.

It is an old yet trite saying that a prophet is not known in his own country, for its truthfulness, as evidenced in the commerce of to-day, leaves no shadow of doubt as to its general correctness. The agitation of many of the small American producers—especially in the Mid-Continental fields—for fresh markets and better prices, coupled with the ill-timed investigation into the policies of Trusts, suggest to the ordinary thinking mind, that matters in this direction may go a step too far, and in the end bring disaster where they intended to resuscitate prosperity.

We all know how the small producers of Kansas and Indian Territory hailed with delight the assistance which that perfect organisation in America placed at their disposal for transporting and marketing their heavy product, and we are also well aware of the fact that when the production of the Mid-Continental fields became so large that not only was the demand in America satisfied and the oil had to seek a market in open competition with the product from other fields, none were more eager to protest against the inevitable drop in prices that occurred than the producers themselves, who had, from the very commencement of operations placed somewhat of a fictitious value upon their commodity. It is likewise common knowledge what a tendency the enquiries into the proceedings of Trusts will have in America, more especially as the company attacked, and in a way held up to ridicule, is one which has more than any other in the world assisted to build up the petroleum industry into one of the most important branches of commerce to-day.

It is far from the American continent that we must go to learn the great advantages which the perfected organisation of the Standard Oil Co. has brought to bear upon the American petroleum industry, and which have gone not a little way in bringing America to the position it occupies to-day in regard to petroleum production.

Russia at all events, appears now to be recognising its shortcomings in the past, and seems not unwilling to look to American methods as exemplified in the conduct of the Standard Oil Co. for guidance in the future.

We have by us the current issue of the *Neftiannoie Dielo*, in which a well informed writer of the petroleum industry—Mr. Isnar—dwells at length upon the history of the Standard Oil Co. and the principles of policy which it has laid down, and shews that the absence of these has gone far to cripple the progress of the petroleum industry of the Tzar's domains. He points particularly to the way in which the American producers are handling their oil, mentioning that they transfer it to the pipe line companies, and as a receipt receive certificates which they can exchange at any time for cash. This method, he contends is, from the point of view of the producer, an ideal one, for the reason that the exchange of goods for money entirely depends upon the will of the producer, who, of course, sells at the most favourable opportunity.

In Russia there are no certificates, for the pure and simple selling of the oil takes place. Therefore, immediately the producer has produced his oil, he sells it, and receives bills in payment, which in many cases prove very risky transactions.

Again, the American refining industry, he points out, is in a far better condition than that of Russia. In America, about 90 per cent. of the refining, is centred in the hands of one organisation, whose policy is known and fixed upon limited lines, whereas in Russia there are no less than 160 firms engaged in the Baku refining industry, all of which act independently, and consequently there is an entire absence of policy or procedure.

Finally, the disposal of the crude and its products in America is mainly concentrated, which is an immense advantage to all parties concerned, but in the Caucasus there is no such organisation, and, as a result, the advantages which such a system bring are absent, and in their place we find numberless factions each working in their own little way for their own good.

But there is one point which Mr. Isnar does not mention, yet which appeals to us with great force: it is that in America there is a proper standardisation of the products received from petroleum, if we may call it so, whilst in Russia there is no basis of specification observed. Let us explain ourselves lest we be misunderstood. Each of the products received from the oil in America has a fixed standard—that is, they are respectively of a definite physical and chemical character, and prepared, so far as their natural character will admit, to perfection.

In the whole history of the Standard Oil Co., it must be remembered, so careful an eye has been kept upon the products of the oil in the course of refining, that nothing has been left to remain but what has been turned to profitable account. In regard to the Russian refining industry, we regret to say that a totally different state of affairs exists. Outside the introduction of the continuous system of distillation, the method of refining, and the number of products received from treatment, is very much in the same way as it was quite a quarter of a century ago. Certainly no step forward has been made, for to-day practically fifty per cent. of the crude oil containing valuable products is used as fuel. If anything, we may state that a retrograde movement has set in among those interested in the refining industry of the Caucasus. As we announce upon the opposite page, a policy has been initiated by one of the leading refiners in Baku, which is bound to have a backward tendency, for instead of concentrating all efforts towards producing a superior illuminating oil, or extracting products from the residue which would command a ready and very profitable market, it has been decided to prepare an inferior illuminating oil which reminds us very much of the days when the Caucasian refining industry was in the hands of the ignorant Persians. We must confess that we are greatly astonished that the railway company has given permission to assist in the exportation of such a product, for it represents a mixture of heavy benzine and kerosene—a mixture which though possibly satisfying the demands of law from a flash point of view, is absolutely dangerous, and if allowed to come into the market will be responsible for many unfortunate accidents, and thus do much to create prejudice against the consumption of oil.

We feel sure that if the Russian refiners glance toward the methods adopted in America, they will have much to learn, in fact it is an open secret that this is so, but why one of the leading refiners should attempt to foist upon an unsuspecting public an article which is the product of a decidedly retrograde move in the scientific branch of refining, we fail to understand.

Russia has a growing desire to step forward. The Government is paying more and more attention to assist the petroleum industry in order that it may be from a commercial point of view upon a fair level with that of America, but we venture to suggest that the refiners should assist by putting their shoulders to this wheel of progress, and should not initiate anything which will be a step backward, and at the same time tend to create prejudice—and justly so—among those who consume oil.

We admire the sentiments expressed in the statements of Mr. Isnar in our contemporory, but we would wish to go further and see that the worthy example of America should be worthily followed, for it is in this that Russia lacks.

BAKU PRODUCTION IN MARCH.

According to official statistics now to hand, the total output of crude oil at the Baku oil fields in March amounted to 38,381,000 poods, of which Bebe-Aibat produced over 11,800,000 poods. Spouters in March yielded only 148,000 poods. The output in February having been only 30,800,000 poods, the March figure shews that the efforts directed towards restoring the production have been attended with some measure of success. There is, however, still a very large shortage of oil on the market, as is shewn by the following comparative figures of the output for the first three months of the last three years (in million poods):—

	1904.	1905.	1906.
By Baling	139 3	131·0	98·7
By Spouters	3·3	3·2	4·8
Total	142·6	134·2	103·5

The production of the principal firms at the oil fields during March was as under:—

	Poods.
Nobel Bros.	4,500,000
Caspian and Black Sea Society	3,050,000
Baku Naphtha Co.	2,470,000
Caspian Society	2,250,000
Moscow-Caucasian Co.	1,980,000
Mantacheft and Co.	1,560,000
Baku Russian Petroleum Co.	1,310,000
Russian Petroleum and Liq. Fuel Co., Ltd.	1,200,000
Zoubaloff	1,180,000
Schibaieff and Co.	1,100,000
Assadulaeff	1,070,000
Mirzoeff Bros.	1,030,000
M. Nagieff	1,000,000
Bibi-Eybat Petroleum Co., Ltd.	980,000
Russian Naphtha Co.	900,000
Naftalan Co.	600,000
Ter Akopoff	600,000
Kalantaroff	490,000
European Petroleum Co., Ltd.	430,000

The average prices of petroleum products at Baku during the month, according to official quotations at the Baku Oil Exchange, were as follows:—

	Copecs per pood.
Light crude, in Black City	27·6
Heavy crude, in ships	30·4
Residuals, in ships	30·0
Kerosene, in waggons	29·3
,, in ships	31·3

During March the quotations of oils reached their highest level, for February the average price of light crude in Black City was 24·9 copecs, whilst a year ago the corresponding figures were:—Light crude 14·6 copecs, and residuals 16 copecs. The present highly remunerative prices are certain to act as a powerful stimulus for the further development of operations at the oil fields.

PHOTOL—A NEW AND DANGEROUS ILLUMINATING OIL.

The Russian Railway Council have, at the instance of one of the large refiners, granted permission for the transport of a petroleum product called photol in ordinary tank waggons. This is a special illuminating oil, consisting of a mixture of ordinary Russian kerosene with heavy benzines, and has a minimum flash-point of 20° C., and a specific gravity of from 0·800 to 0·820. The oil is said to burn better than ordinary Russian kerosene in lamps adapted for American oil, which are widely used in European markets, and it is therefore contended that it is able to more successfully compete with American oil, which it closely resembles. Photol, it is said, satisfies the requirements of the foreign markets, and in facilitating its export trade abroad a great benefit will be conferred on the Russian petroleum industry by relieving the refineries at Baku of the accumulated stocks of ligroin, gasoline and other light distillates, for which no use can now be found.

MARCH IN THE AMERICAN FIELDS.

The story which March has told in regard to field operations in the Pennsylvanian oil fields is pretty much the same as others which have recently gone before it, but in one particular is far more satisfactory. Increasing attention is being paid to Point Pleasants, in Tyler county, where the new wells are being struck, yielding much above the average production, and thus, for the time being, at all events, the decline in the output of West Virginia has been stayed.

During March 83 fewer wells were completed in the Eastern oil producing districts than in February, while the new production shewed an increase of 656 barrels. There was likewise a drop in the number of dry holes and gassers. The field developments shewed a net decline of 50 wells. There were 27 more wells completed in the oil producing sections of New York, Pennsylvania, West Virginia, and South-eastern Ohio, in February than in January, and the new production made a gain of 469 barrels. In field operations there was a gain of 20 rigs and a loss of 39 in the number of wells drilling, making a net decline of 19.

The new production for March was 3,906 barrels, which was an average of 11 barrels to the well. For March a year ago, the new production was 3,973 barrels and only 480 wells were completed. There were 353 productive wells completed in March, 398 in February, 407 in January, 445 in December, and 528 in November. The average yield of the new wells for February was 8⅛ barrels. For January the average yield was 6·82 barrels, which was the lowest ever recorded. For March a year ago the new wells averaged over 13 barrels each.

In the Trenton Rock oil fields of North-western Ohio and Indiana, there is a general decline in all departments of field work during the month. Sixteen fewer wells were completed in March than in February; new production declined 111 barrels, and there was a decrease of five dry holes. In work under way there was a drop of three rigs and 22 wells drilling.

During March the Lima oil districts completed 220 wells and the new production amounted to 2,151 barrels, while the dry holes numbered 23. At the same time 481 wells were completed in the Pennsylvania oil districts, including 131 dusters and gassers, and the new production amounted to 3,906 barrels. That is, the Pennsylvania districts completed more than double the number of wells that were completed in the Lima oil fields, while the new production was less than 50 per cent. greater. Of the Pennsylvania wells, 131, or about 27 per cent., were dry holes or gassers, while only 23 of the Trenton Rock wells, or about 10 per cent., were classed as unproductive. In the Kentucky-Tennessee oil districts, the *Oil City Derrick* states that the operations are attended with various results, but the production is not being increased by the new wells completed from month to month. There were 25 wells completed in March, with four of them dry, and the new production was 502 barrels. This represented a loss of eight wells completed, accompanied by a gain of 62 barrels in the new production In new work there was a net gain of three. Cumberland county presented some new attractions during the past month, but the bulk of the developments is confined to Wayne and Wolf counties.

AMERICAN NOTES

An Important Merger.—It is reported that a merger of the New York Petroleum Co. with the Colonial Oil Co. is to shortly be arranged. The new company will have a capitalisation of $1,000,000 eight per cent. cumulative preferred stock.

A New Pipe Line.—The independent producers of the Texas fields are said to have organised a company which is to construct a pipe line system connecting Spindle Top, Sour Lake, Humble, Batson and Saratoga. Work will be commenced in a few days.

The Barnsdall Oil Co.—Some important oil properties in the Kansas and Indian Territory fields have recently been merged into a new concern known as the Barnsdall Oil Co. The deal is said to involve about 400,000 acres of oil lands with a daily production of 16,000 barrels.

A Jennings Gusher.—The production of the Jennings field has been greatly augmented by the coming in of well No. 4 of the Producers' Oil Co. upon the Jennings Oil Co.'s lease. According to the latest issue of the *Oil Investors' Journal*, the well was making 6,000 barrels per day at the beginning of April.

Tyler County's New Pool.—A dispatch from Pittsburg states that the newly discovered pool in Tyler county at Point Pleasants is daily growing in interest. Altogether seven wells are now producing, and the combined yield of these is about 1,000 barrels daily. Development work is increasing in every direction.

New Oil Companies.—Among the companies which have been recently registered in Texas are the following:—The Carroll Oil and Gas Co., with a capital stock of $100,000; the Houston Oil and Gas Co., capitalised at $150,000; the Junior Oil and Pipe Line Co., the Eleven Oil Co., the South Texas Oil Co., and the Ferris Oil Co.

Developments in the Anse la Butte District.—With the advent of finer weather, operations are proceeding in the Anse la Butte district in a very energetic manner. To-day only five wells are producing, but others are in course of drilling, the J. M. Guffey Petroleum Co. having just commenced the development of its territory in the field.

Port Harford a Port of Entry.—A bill has recently been introduced in congress, writes a correspondent in California, to make Port Harford a port of entry. Large quantities of crude are loaded there by the Union Oil Co. and the Standard, and these will in future be further increased by the shipments of the Californian Petroleum Refineries, Ltd.

From California.—At a recent meeting of the Californian Oil Producers' Association, the committee appointed to collect information as to the production and consumption of petroleum in the State, reported that the information they had secured from trustworthy sources shewed that the production was about 2,760,000 barrels per month, while the consumption was 2,750,000 barrels, the difference being only 10,000 barrels.

In the Santa Barbara Field.—It is reported that there is a considerable amount of activity in the Santa Barbara oil field of California. The Union Co. is still at work upon its deep wells, which, strange to say, are more easily sunk than those of a shallower nature in other localities. The Los Alamos Development Co. has the deepest well in the field, this being 4,300 feet deep and giving oil of the highest quality of 35° Beaume. The well is holding up at 250 barrels daily.

In Lower Kentucky.—A new territory in lower Kentucky, centred about the Wayne-Whitley border, is now turning out some good producers. A new strike the latter part of the past month shews up as the best well of the year in the Kentucky fields, the initial daily flow of 500 barrels being maintained. The new field is known as the Sinking district. Attention was first attracted two months ago by the coming in of a 300-barrel well, and several of the gushing class have since been drilled. An extensive pool has been proven. Another territory which is just commanding attention, and which shewed excellent results last month, is in the western section of Whitley county. Several wells of fair capacity were drilled during the month, and pipe line connections will be made between the new field and the Wayne county divisions in the near future. The new divisions are many miles from previous developments, and prove some important extensions of the lower Kentucky field.

GALICIAN NOTES.

A German Company, the founder of which is said to be a certain Herr Brauns, has commenced boring for petroleum near Szumina.

At Tustanowice, the Banzai well of Messrs. Kurz Langer, Sulimirski and Co. has increased its yield to 70-80 tons daily. This well is 872 metres deep. The total production at Tustanowice in March is said to have exceeded 20,000 tons.

At Strzelbice, near Old Sambor, where on the property of Count Wodzicki, petroleum was being produced for some time from 40 shallow hand wells, a borehole was started last autumn by a specially formed syndicate, which well has now reached a depth of 250 metres.

Niebylow.—Dr. Freund's well at Niebylow, started recently, has now reached a depth of 130 metres. The strata traversed are analogous with those found at Boryslaw. Traces of oil were first encountered at 100 metres. Another firm is about to start drilling at Niebylow, on a plot adjoining Dr. Freund's.

Latest Oil Strikes at Tustanowice.—The latest news from Tustanowice is that powerful eruption has taken place in well No. 1 of Messrs. Laszcz and Dlugosz at a depth of 917 metres, in Mr. Synge's well on the Hubice tract at 760 metres, and on the Stanislaw plot of Mr. Nowak on the Panska Road.

At Rayskie, operations are proceeding in a favourable course, and the output is now said to amount to 30 to 40 tons of crude oil daily. The producing well is but slightly more than 400 metres deep. Operations preliminary to the laying of a pipe line by the Galician Petroleum Storage Co. are being actively proceeded with.

The Schodnica Company.—The annual meeting of the Schodnica Co. took place on the 18th of March, at which the report and balance sheet for the year 1905 were considered. The profit earned in 1905 amounted to 694,899 kronen, out of which 600,000 kronen will be applied to pay a dividend of 30 kronen per share.

Borings in Bukowina.—A German syndicate is reported to have commenced drilling for petroleum in the Wischnitz district of Bukowina, adjoining the Kosow district of Galicia. Another firm operating in Bukowina is the Central European Oilfields, Ltd., who have taken over the concessions of the late Societe Anonyme de Bukovine.

The Galician Petroleum Association.—The annual meeting of the Galician Petroleum Association was held at Drohobycz on the 2nd of April, at which the report of the activity of the association for the past year was submitted. Mr. August von Gorayski was re-elected president, and Messrs. Dr. Jan Steczkowski and W. H. MacGarvey were re-elected vice-presidents of the association.

The Refiners' Cartel.—At a meeting of the cartel at Buda-Pest, in March, it was resolved to lower the price of illuminating oil by 30 francs per ton. This reduction is attributed to the increased competition of Roumanian oil, and to the fact that a number of small refineries in Galicia and Upper Hungary, which are outside the cartel, are steadily underselling it. The condition of the trade is generally admitted as unsatisfactory.

The Petrolea Company.—The differences among the members of the Petrolea Co. have not yet been settled. The number of producers outside the "Petrolea" is growing, and their competition is making itself felt very keenly. It is stated that all the large refineries, with one exception, have already signed the agreement with the Petrolea Co., by which they undertake to purchase for every 10 tons of oil for export purposes, 20 tons for the home consumption.

The Galician Petroleum Storage Co.—The annual meeting of the Galician Petroleum Storage Co. was held at Lemberg on the 31st of March. This company was formed some ten years ago, with a small capital. Now the company owns tanks of a total capacity of 60,000 tons and nine pipe lines of an aggregate length of 75 kilometres. The tanks have a value of 500,000 kronen, of which half has already been written off. The pipe lines are valued at 750,000 kronen, of which a third has been written off. The gross profit for 1905 amounted to 123,062 kronen, out of which a dividend of 12 per cent. has been declared.

TECHNICAL PUBLICATIONS.

Handbuch der Tiefbohrkunde *(Handbook of Deep Boring), by Th. Tecklenburg. (W. and S. Loewenthal, Berlin). Second Edition, Vol. II.—Water-Flush and Rapid Methods of Boring.*

It is nearly twenty years since the author issued the first edition of his monumental handbook on the various methods of deep boring, and the advances that have been made in the interval have rendered it desirable to bring the work up-to-date. The first volume dealt with the English, American, and Canadian systems of boring, and the other volumes to follow will treat respectively of the diamond system, well boring, sinking inclined holes, under-reaming, fishing and pumping, and shaft boring.

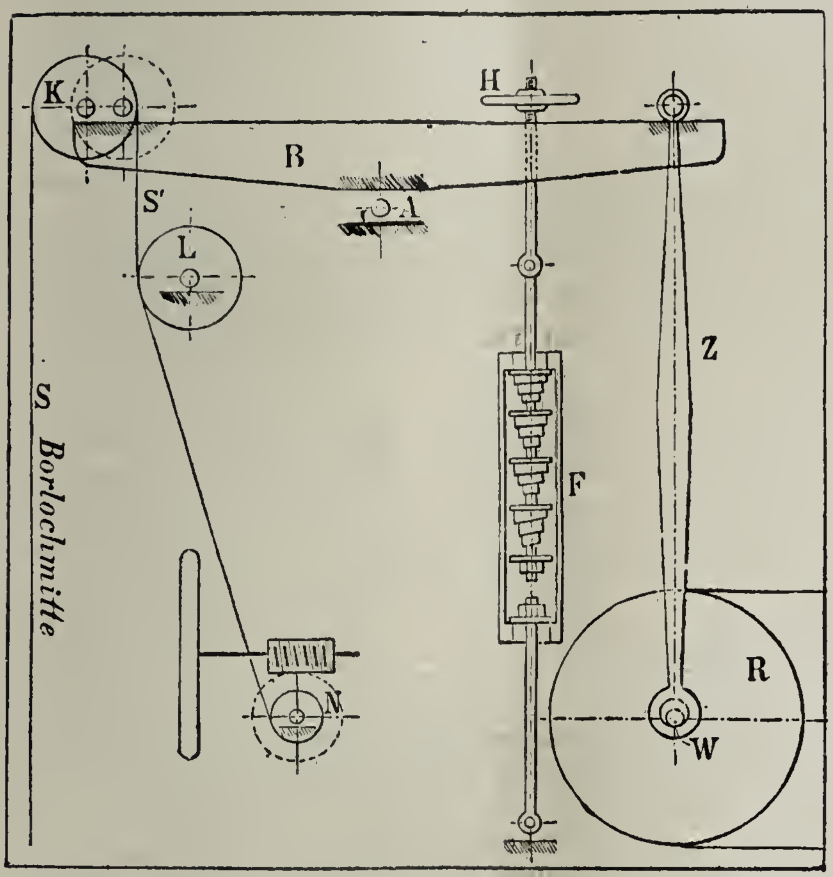


Fig. 1.

The part now under consideration is that relating to boring by the water-flush and rapid percussion systems, which are largely employed in sinking for coal, oil, etc. Nearly all the appliances described are of German or Austrian manufacture, the development of the industry in those countries having been favoured by local circumstances. On the one hand, the development of the oil fields in Galicia, Roumania and Germany has called for a large supply of boring appliances, and coincidently, the Prussian Mining Law has had a stimulating influence in the same direction. Under this law the first party to discover a mineral deposit has the sole right to work it over a certain area, the mining rights being the property of the State and not of the owners of the soil. It is therefore not surprising that a demand should have arisen for a more rapid system of sinking boreholes down to suspected or partly proved deposits of coal and other minerals, each prospector being desirous of outstripping his competitors in the race for obtaining a working concession. With what success this struggle has been conducted by enterprising boring firms is evident from the fact that the Internationale Bohrgesellschaft, of Erkelenz, working with the Raky system of rapid boring, has sunk boreholes of an aggregate depth of 381,000 metres in ten years, and recently disposed of its coal concessions acquired in this way for an enormous sum to a company formed to work them. So great, in fact, has been the stimulus to the boring industry, that, as the author informs us in his preface, over forty large firms are now engaged in it in Germany alone, and, under the conditions prevailing there, they have been able to enlist the active co-operation of bankers, so that a considerable amount of capital is engaged. The aggregate staff employed is about 4,500, and the annual expenditure on salaries and wages amounts to over £350,000 per annum.

After briefly recapitulating the historical development of the water flush system of boring, the author proceeds to describe in detail the various appliances used in general, such as the boring bits, casing, "jars," free-fall instruments, temper screws, and analogous devices for lowering the bit as the work proceeds, auxiliary tools, pumps, drive pipes, prime movers and derricks. The bulk of the work, however, is given over to the description of various sets of plant, 43 in all, by various makers, including such well known names as Humboldt, of Kalk; Deseniss and Jacobi, of Hamburg; Trauzl and Co. and Fauck, of Vienna; Lapp, of Aschersleben; Raky, of Erkelenz; the Deutsche Tiefbohrgesellschaft, of Nordhausen; Wolski, of Lemberg; Thumann, of Halle, etc. A short account of the principal points to be attended to in sinking a borehole, a list of various deep borings, and a bibliography, conclude the work, which is copiously illustrated by means of 16 lithographed plates and 144 woodcuts.

From among the illustrations of rapid boring apparatus we reproduce a diagram (Fig. 1) representing the principle adopted by Fauck, in which the walking beam B is driven by a pitman Z from an eccentric shaft W. The downstroke of the pitman compresses the coiled springs F, so that as the upstroke begins, these springs expand rapidly and allow the bit to fall suddenly on the bottom of the hole with a powerful impact. The height of fall can be adjusted by altering the pitch of the eccentric. Another way of securing the same result, namely, a short stroke repeated at rapid intervals, is that

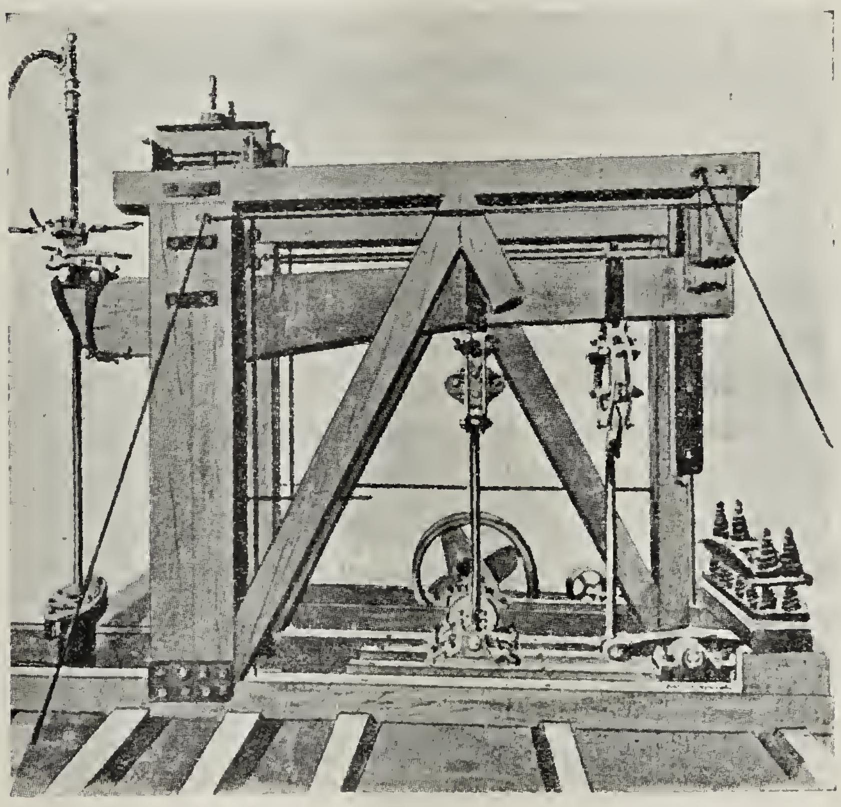


Fig. 2.

of the Deutsche Tiefbohrgesellschaft (Fig. 2), a model of which was shewn at the Liége Exhibition. The chief feature in this case is the articulated spring cross-head connecting the pitman with the walking beam, in such a manner that the stretch of the spring gives the beam a longer stroke than that of the crank, and thus enables the bit to strike a more powerful blow. To take up the vibration of the rebound of the tools, the old headache post is replaced by a drawbar connected with the rear end of the beam by an articulated spring joint and acting on a lever controlled by coiled buffer springs.

Another ingenious set of plant is that of Thumann (Fig. 3), which is arranged to work either the rapid, free-fall, or diamond systems. There are two main shafts: the one fitted with a short stroke eccentric and pitman *t*, for the rapid-boring system; the second with a long stroke crank *c* for free-fall boring, in which case the pitman *t* is replaced by T. The beam is in two parts, *fu* and *o*, articulated at M, and fitted with an interposed spring buffer, which ensures elastic suspension of the boring tools, and also helps to produce the jar on the headache post essential to free-fall work, as well as carrying the crank *c* past the lower dead point. The lower part (*fu*) of the beam can be tilted up out of the way when the hole has to be cased or baled. The diamond drilling tools can be mounted in the usual way, as shewn at R.K.

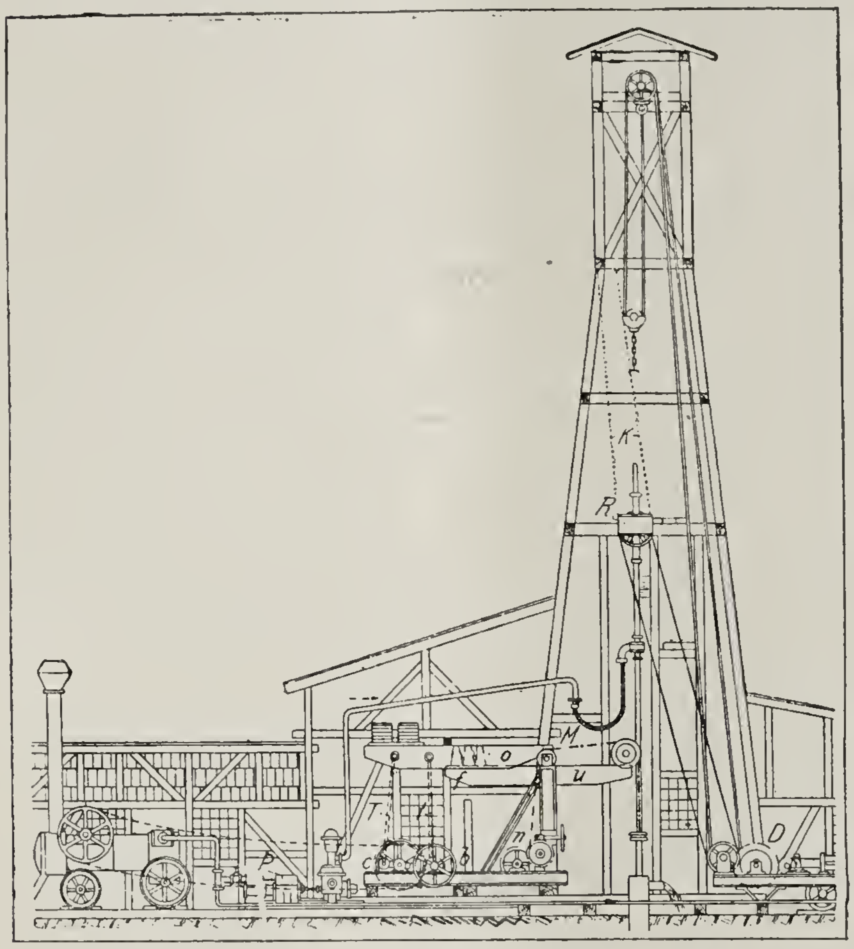


Fig. 3.

* * *

Batoum Petroleum Shipments.—The shipments of petroleum products from Batoum for the week ended April 8th (o.s.), were as follows:—

	Illuminating oil.		Other products.	
	1905.	1906.	1905.	1906.
To Europe	474,000	695,000	132,000	201,000
To the East	100,000	37,000	9,000	—
To Russian Ports	99,000	—	7,000	17,000
From Jan. 1st to April 8th:—				
To Europe ..	5,580,000	3,084,000	1,551,000	1,266,000
To the East ..	4,222,000	807,000	105,000	1,000
To Russian Ports	1,153,000	1,234,000	34,000	82,000

RUSSIAN AND ROUMANIAN NOTES.

Nearing the Oil Strata.—A number of boreholes in the Roumanian oil fields are expected to strike oil this month, and the April figure of the crude oil production is certain to shew a substantial increase.

Great Demand for Crude Oil.—Crude oil in Roumania is in great demand. Buyers offer good prices and long term contracts. Apart from the large refineries in the country, there is also a demand for Roumanian crude oil from abroad.

The Russian Bibi-Aibat Petroleum Co. in the financial year 1905 earned a gross profit of 71,859 roubles, of which 54,335 roubles were applied for depreciation of properties, and 16,000 roubles were distributed as a dividend to the shareholders of five roubles per share.

An Imperial Decree has been issued sanctioning the resolution of the Baku Petroleum Association to raise the levy on the petroleum producers for the common needs of the industry from $\frac{1}{5}$ to $\frac{1}{2}$ copec per pood of oil removed from the oil fields. This increase is to be in force for three years dating back from the 1st of June, 1905.

The Telega Oil Company.—According to the *Moniteur du Petrol Roumain*, a meeting of shareholders of the Telega Oil Co., Ltd., will be held in London on the 31st of May to adopt the balance sheet for the last two years, and pass a resolution to wind up the company and transfer the assets to a company to be formed in Roumania, under the title of Sylva Co.

The Baku Naphtha Co.—Upon the requisition of a number of shareholders, an extraordinary general meeting of the Baku Naphtha Co. is called by the directors for the 1st of May to—(1) Transform the working capital into share capital by the issue of new shares; (2) to increase the number of directors on the board; and (3) to modify the articles of association accordingly.

Another Fountain.—Well No. 8 at Vrajitora-Campina, of the Campina-Moreni Co., has struck oil at a depth of more than 700 metres. A violent eruption took place, throwing out large quantities of sandstones and some oil, causing some damage to the derrick. The well has now been shut down to enable the derrick to be repaired, when the borehole will be cleared of obstructions and the production of oil resumed.

Petroleum Products for the Interior.—The first shipments of petroleum products from Baku since the opening of navigation have now arrived at Astrakhan, and the whole of the Astrakhan fleet of roadstead barges has gone out to the 12-ft. roadstead to meet the steam and sailing tank vessels. Up to the 29th of March about 1,000,000 poods of residuals had been delivered at Astrakhan for the needs of the shipping industry.

The New Excise Duty.—In spite of the protests of everyone interested in the petroleum and allied industries, the law imposing an excise duty of 60 copecs per pood in benzine, gasolene, solar oils, and lubricating oils came into force on the 14th of April. At all depôts outside the Baku district containing more than 100 poods of the above products, the stock will be ascertained and the duty levied on the same. Up to April 29th the merchants will be free to dispose of these products duty free. From April 14th the amount of the excise duty will be levied on all of the above products imported from abroad, in addition to the ordinary import duty.

The Ter-Akopoff Co.—The Committee of the St. Petersburg Stock Exchange has admitted the shares of the Ter-Akopoff Petroleum Co. for official quotation. The company was formed in 1900 to take over the petroleum properties of Mr. I. N. Ter-Akopoff, consisting of petroliferous lands at Saboontchi, Baku, and refinery and storage installations at Baku and elsewhere in Russia. On the 1st of January, 1905, there were on properties at Saboontchi 19 wells in exploitation, one in trial baling and 19 in course of drilling or deepening. The value of the properties in the balance-sheet on the 1st of January, 1905, stood at 3,891,128 roubles. During the five years from 1900 to 1904 inclusive, there were produced 38,078,197 poods of crude oil, or an average of about 8,000,000 poods per annum. The gross profit earned during the same period was 3,891,128 roubles. The capital of the company is 4,500,000 roubles, divided into 18,000 shares of 250 roubles each.

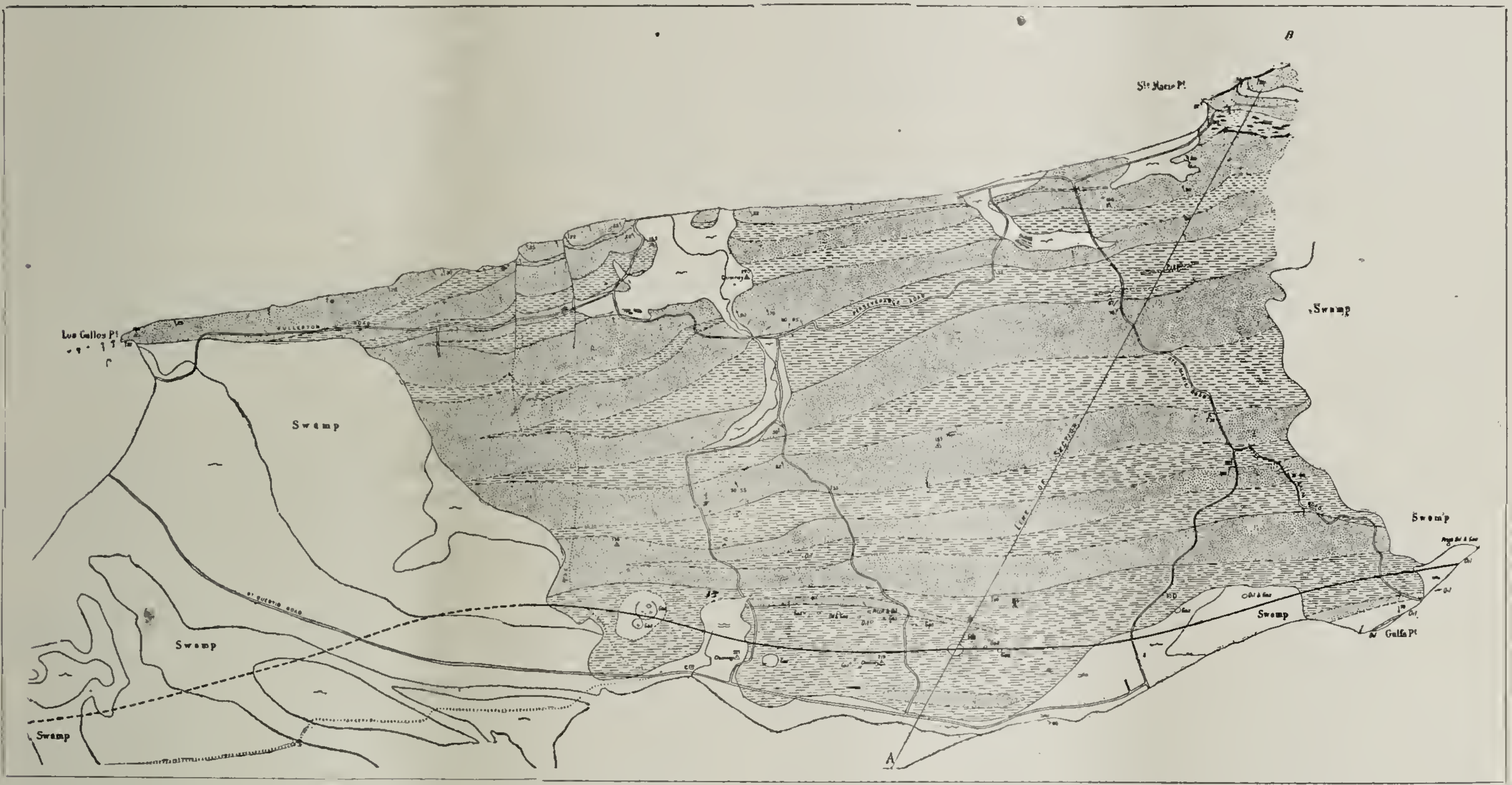
THE CEDROS OIL FIELDS OF TRINIDAD.

REPORT BY THE GOVERNMENT GEOLOGIST.

Mr. E. H. Cunningham Craig, the Government geologist, has recently prepared a report dealing with the Cedros district oil fields of Trinidad, a copy of which has been loaned us through the courtesy of the Commercial Intelligence Branch of the Board of Trade.

In his introduction the writer refers to the area surveyed, and mentions that this covers ground lying to the westward of the area known as the Mayaro-Guayaguayare oil field, being in all 126 square miles in extent.

As to the geological structure, the geologist states that the anticlinal structure is continued, as was predicted in the report on the Mayaro-Guayaguayare oil field, to the south-western extremity of the island. The approximate position of the crest of the anticline is marked on the map, as before, by a thick line. It will be seen that it enters the sea and skirts the shore for some distance, but emerges again.



(*a*) Faults are fairly frequent in some localities, especially in the neighbourhood of inliers of cretaceous strata. They are, as might be expected, dip-faults, and are usually of small throw, though one or two in Canari Bay are more important. The effects of the faults are sometimes difficult to determine on account of lack of evidence, and several more minor faults may be concealed in unreadable ground. They cannot, however, be of any importance structurally, nor have they affected the course of the anticlinal crest appreciably, but are merely a local phase of the great flexuring movement which has effected the tertiary rocks of Trinidad.

(*b*) Complications occur at several points along this great structural line, and have added greatly to the difficulty of determining its exact position. These complications consist of inliers of cretaceous strata, rising in the heart of the anticline and overlaid unconformably by the tertiary petroliferous series. No such inlier was observed in the area described as the Mayaro-Guayaguayare oil field, but it is possible that small outcrops of cretaceous rocks lie concealed in obscure ground at more than one point, *e.g.*, in the central anticline in the most westerly part of the ground mapped as the Mayaro-Guayaguayare oil field.

In any case the occurrence of these inliers and their relations to the tertiary rocks are matters of great importance, and as such outcrops may be expected to occur in other districts of the oil territory, and may have an adverse effect upon the production of oil in many places, it is necessary to consider the evidence with regard to them very carefully.

One point has been ascertained beyond doubt: despite many sections shewing an apparent conformity between rocks of cretaceous and tertiary age, they are in reality separated by a distinct and even violent unconformability and overlap. The apparent conformity is mentioned by Wall and Sawkins in their report on the geology of Trinidad (p. 35), but that it is deceptive can be proved in the ground east of Moruga by sections, where a conformable junction might be erroneously deduced, shewing the juxtaposition, owing to overlap, of cretaceous strata and strata far above the base of the tertiary series.

Great difficulty was experienced in some localities in distinguishing the tertiary from the cretaceous rocks, the banded grey sandstones of the latter simulating very closely the typical soft grey sandstones of the lower tertiary groups (Galeota group). This difficulty is greatest where similar rocks of the two series are juxtaposed in apparent conformity, and it is mentioned here, as it may be experienced in several parts of the island during oil field development. It is evidently useless to drill into cretaceous rocks in the hope of striking oil, as there is reason to believe has been done in Barbados. The highly flexured state of the cretaceous strata and their comparative richness in clastic micas are in most cases sufficient to distinguish them from the tertiaries, while the latter sometimes contain conglomeratic bands with pebbles of cretaceous rocks, which put their age beyond doubt.

Over a considerable area the presence of these inliers of cretaceous strata will affect the oil field unfavourably by preventing any production of oil from the lower oil-bearing rocks (No. 1 streak), which, owing to overlap, has not been deposited over a large expanse of country; it therefore became of great importance to map out the inliers of cretaceous rocks, and to obtain as much information as possible with regard to the extent of the overlap, and the form of the irregular land surface of cretaceous strata during early tertiary times.

(*c*) Another difficulty arises in the great lateral variation in the tertiary series when traced from east to west. This variation is only natural in rocks of estuarine type, but it makes the correlation of different areas a matter of great difficulty, owing to the impossibility of tracing any group or assemblage of beds for more than a few miles. Thus the recognition and working out of the geological structure becomes of even greater importance as purely stratigraphical work loses in certainty. In consequence of this variation it is not feasible to employ the terms used for the various groups in the Mayaro-Guayaguayare oil field report in more than a very general sense, and it is not expedient at present to frame a new nomenclature for the various types of strata exposed, or to use purely local names.

In the area examined the lateral variation may be expressed briefly as follows:—In the south-east sandstones predominate; at Casa Cruz Point the strata throughout the series are almost entirely arenaceous. West of Moruga the sandstones begin to be replaced laterally by clays, the detritus becoming gradually finer and more argillaceous, while large sandstone beds thin out. At Quinam and near Erin the lower part of the series is almost entirely fine clay, with a few hard sandstone beds near the base. The upper part of the series, however, contains more arenaceous beds. In the Cedros district arenaceous beds become more conspicuous again, at the expense of clays, and the series as a whole is more of shallow water type.

Similar lateral variation is the rule rather than the exception at Trinidad, and was referred to in the general report on the eastern coal district, where, as was pointed out, it caused the sub-division of the tertiary series by Wall and Sawkins upon lithological grounds, a sub-division, which, useful as it has been for descriptive purposes, has caused some confusion and misunderstanding among geologists and geological writers, who have not had the opportunity for extensive field work in this colony.

It is unnecessary to describe the cretaceous rocks of this area in detail. Fine banded sandstones and clays appear in the eastern portion, while further westward clays are the rule. One small exposure of the hard siliceous grits has been observed west of Mont Diablo, and among the clays of the Quinam inlier an exposure of slightly calcareous foraminiferal and radiolarian marl, resembling the rock of San Fernando Hill, has been detected.

As we proceed westward from Guayaguayare a great mass of arenaceous strata is encountered, the lower and upper Galeota sandstones increase in thickness at the expense of the lower and upper Galeota clays, which thin out and are very poorly represented. This is obviously due to the approach to a tertiary river mouth, and suggests the presence of land to the south-east of what is now the island of Trinidad during early tertiary times. The thickness of the series calculated in the Mayaro-Guayaguayare oil field does not seem to have been exaggerated. The thickness of strata between the lowest tertiaries exposed and the coast at Casa Cruz Point cannot be less than 3,300 feet, and owing to overlap the lowest beds have certainly been cut out at this locality. Doubtless the extent to which sandstones and such shallow water deposits have accumulated renders the series thicker in this part than in those where clays are more in evidence. Thick, soft, yellow sandstones, hard calcareous sandstones, and what may be called "lagoon sandstones," with iron-cemented concretions and laminæ, cover the greater part of the ground, dipping steeply to the south-south-east and rising in the Trinity Hills to the greatest altitude on the southern range, while on the coast they form lofty and usually unscaleable cliffs.

At Casa Cruz Point the clay beds are represented by soft, fine, grey sandstones and sandy clays, and the whole Galeota group may be said to be arenaceous. In this vicinity a great overlap of the tertiary strata upon the cretaceous may be seen on the steep northern slope of the hills, the denuded surface of the older rocks rising high in the tertiary series. At this point the strike gradually changes and becomes east and west, but the arenaceous type of sediment continues.

At Canari Bay a fault throws the outcrop to the north, and a more argillaceous type of sediment appears in the shore section, the cliffs disappear, while exposures on the beach give evidence of many small landslips. Fine banded argillaceous sandstones with a few hard, thin calcareous beds and occasional carbonaceous laminæ and lumps or strings of coal are observed. A ground plan of numerous small slips is laid bare on the shore, planed off by wave action, and the section gives an appearance of contortion very puzzling without the evidence obtained in areas further westward, where such series of slips can be seen actually in process of formation. The horizon of these rocks lies at approximately 4,000 feet above the base of the tertiary series (or rather the lowest beds observed), and can be traced and recognised, with some local variations, for miles along the southern coast.

At the west end of Canari Bay two or three small faults bring on a group of hard yellow sandstones, below the banded argillaceous and carbonaceous group, forming steep cliffs. The dip varies between 50 degrees and vertical, to the southward.

The strike then follows the coastline for some distance, hard and soft, grey, yellow and iron-stained sandstones forming the bulk of the section, which resembles that on the eastern coast south of the Benitie road.

Traces of lignitic deposits occur in fine sandy clays between the sandstone beds, and become increasingly conspicuous to the westward till at a point one and three-quarter miles east of the mouth of the Moruga river, thick beds of highly carbonaceous shale containing strings and patches of lustrous black lignite are observed. These will be described more fully in a special report dealing with the lignites of the southern and south-western districts. The horizon is the same as the rocks of Canari Bay, and they are underlaid by thick yellow sandstones and lagoon sandstones with false bedding.

The section is continued to Moruga by varigated sandstones and clays, calcareous beds being uncommon, but round or disc-shaped calcareous nodules or concretions of large size being conspicuous in many of the more massive beds. The clays are thin and sandy.

Beyond Moruga the coastline still follows approximately the same horizon till a small fault brings down the fine argillaceous sandstone previously mentioned. Then for a distance of two miles, landslips are so numerous, and the effects of old landslips shewn in plan on the shore so conspicuous that the section furnishes little solid evidence. These slips are due to the grey argillaceous sandstone, which passes into a clay in some beds. Solid overlying sandbeds have slipped over and with the clayey beds in all directions from the cliff. The dip is still high, varying from 60 degrees to 75 degrees; inversions, which are frequently seen, are due entirely to landslips.

(To be continued.)

LIGHT: The Great Civilizer.

By . . . .
DR. DAVID T. DAY.

Upon the above subject, Dr. David T. Day, the chief of the mining and mineral resources division of the U.S. Geological Survey, writes a most interesting article in the current issue of the *American Magazine*. He pays particular attention to the fact that the use of oil has revolutionised history, and says the unexampled growth in comfort and intelligence in the last half-century was chiefly due, not to the great scientists and educators, but to the fortunate coincidence of a chain of intrinsically insignificant events. Its cradle was the unromantic vicinity of Pittsburg, Pa., and most of its prime factors are familiar to the point of contempt.

Ancient Form of Lamp.

About 1847, a Scotch chemist, James Young, began a series of experiments in Glasgow in the distillation of mineral oil from bituminous shales. Later he came to Boston, Mass., and continued his experiments on the shales, coals and asphalts shipped to that point from Canada and elsewhere. Others, following him, exploited the still richer shales of Kentucky, and the news of this exploitation came to Pennsylvania and West Virginia, where oil already distilled by nature was being found in boring brine wells. This oil was a nuisance to the brine prospectors. A little of it was bottled and sold as a medicine.

Fortunately for the world, Pennsylvania oil, with its high proportion of volatile ingredients, naphtha, gasolene and the like, was too explosive in its natural state for a fuel or an illuminant. Pittsburg, moved by the success of the shale distillations, began trying to refine it. And this brought it to the notice of the greatest modern benefactor of mankind, Samuel M. Kier. Kier was a Pittsburg druggist, a humble person who had been selling oil as a patent medicine, "Kier's Petroleum." Like other patent medicine dealers, he had a gift of utilising whatever came to his hands. When he and his fellow-residents began refining oil, he began to burn it. Then came his step of progress. He surrounded the flame with a glass chimney.

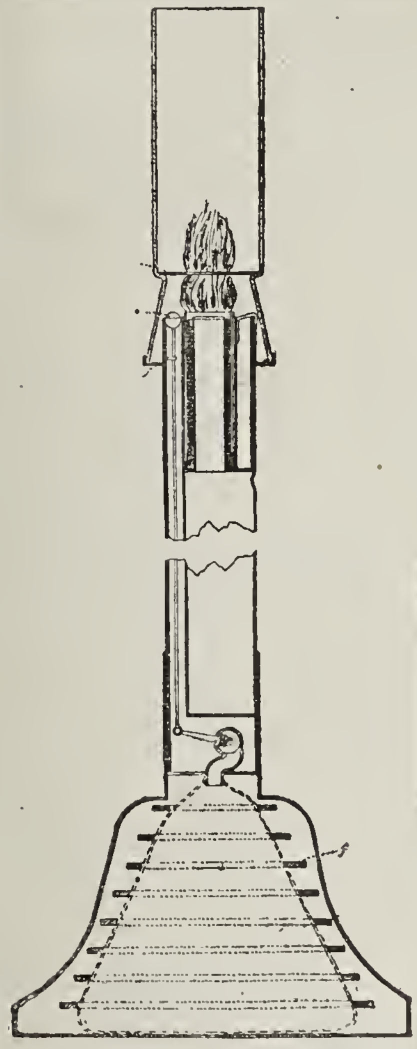
In so doing he presented to human eye the first steady bright light, except the sun, that it had ever used. Beside this achievement the work of Edison and all other great illuminators is absolutely trivial. All previous lights, fire, the torch, the candle, the open lamp, the gas flame without its modern adjunct, the jet, had been flickering and unsteady, exhausting to the eye, and weak. The best of them still survives in a certain antiquated type of lantern, with a round, solid wick, giving a wavering light of about one candle-power. Kier's lamp, with its argand burner and chimney, was thirty-fold as strong and perfectly steady.

Kier did not invent the chimney. Ami Argand had used it in 1784, and its origin, like that of the steam engine and the theory of evolution and most other vital discoveries, may be traced back till it is lost in obscurity. But Kier put it to its first practical use; he burned in it the new illuminant which alone could make it universal; it became an advertisement for petroleum. People saw it, marvelled, desired and from all around Pittsburg came a cry for the oil that made the new light possible.

In a few years thousands of wells had been bored, and the use of petroleum was spreading in wider and wider circles over the continent.

Up to 1850, continues Dr. Day, society was divided into two great classes, clergy and laity, read and unread. The clergy read by day; it was part of their work. The layman had other work by day; at night, with body and brain tired by the day's work and eyes tired by a weak, flickering light, he could read nothing which required concentration; practically, he did not read at all. Reading at night was a feat of phenomenal effort, handed down as the achievement of a few men like Franklin and Lincoln, and doubtless responsible for much of their success The bright light made reading a universal habit.

Independent of political democracy, intellectual democracy is becoming a world force and dragging social democracy reluctantly after it. Russia in revolt, France shaking off the ecclesiastical yoke, Germany, America, the British Empire peacefully remodeled into communities still political in form, but industrial, agricultural, commercial in essence, all speak the book in the hand of the toiler—the work of the bright light. Fifty years ago public opinion was a figure of speech. To-day it holds the tiller of the world. Its origin, like that of other forces, is humble—and odoriferous. The mother of public opinion is kerosene.


Young's Lamp where the Oil was Contained in a Flexible Bag.

Proof? Compare the relative progress of the nations in the last half-century, the degree to which they have attained the consummations mentioned—abolition of the clerical class distinction, industrial and commercial development, skilled labour and a prosperous artisan class, independent thought, intellectual democracy, public opinion—with their relative consumption of kerosene.

Progress has been swiftest in the United States, and this is due to oil.

France is far behind. The distinction of clergy and laity still survives. The French make their streets glare with electricity, but they do not light the insides of their houses. They put a heavy import tax on refined oil, because the demand for it at any price is so intense that it makes a beautifully steady source of revenue, and under protection of this tax do their own refining in a perfectly inefficient manner. Consequently, there is little or no reading by night. The peasant has choice of going to mass or to bed. The city dweller flees to the one brightly lighted spot—the boulevards. All because cheap kerosene cannot cross the border. "The Man with the Hoe" typifies humanity bereft of the services of kerosene.

Italy and Spain are still further behind, more sharply divided into clergy and laity, with less commerce, less industry, less public opinion. Their progress in the last half-century has been greater than in the previous ones, but relatively to that of other countries seems trifling. They have poor lamps, poor oil and not much of it. Egypt, Turkey, Syria, Persia have made no progress. Except for the work of Europeans within their borders they have stood still. They have practically no lamps and no oil. So of the rest of the East, save Japan.

Japan, however, has lately developed enormous oil fields in Echigo and elsewhere, and buys American and Russian oil in great bulk. The relative development of Japan and China is in exact proportion to their respective importation of oil.

Russia, second in production of oil and nearly last in progress, seems an exception to the rule. But Russian oil is used principally for fuel. Its proportion of illuminant ingredients is only a third that of American oil, and of this very small fraction four-fifths is exported.

Great Britain, thanks to Young in Glasgow, developed the shale oil industry parallel with the petroleum industry in the United States, and has followed her sister nation, in lighting and in progress, as closely as the difference in natural advantages would permit. Germany took to the American lamp and to American oil, promptly and largely. The quality and quantity of American oil imported into Germany and France, as into Japan and China, is an accurate measure of their relative progress.

Later improvements in lighting have not taken, and for a long time cannot take, the place of oil. Gas is available only in cities, electricity is costly. Oil is the light of the uneducated man, by which he becomes a reading citizen. As he achieves emancipation his lamp is replaced, for convenience, not for better light, by gas or electricity. But kerosene is the light of progress.

GERMAN JOTTINGS.

The Erdoelwerke Gluckauf Wietze Co.'s property at Wietze has been recently disposed of by auction, being secured by the Rheimsche Oelwerke Co., of Lautenberg, Alsace, for 50,000 marks. The property comprises 59½ morgen of land in the localities of Bannetze, Steinfoerde, and Little Wietze.

* * *

Well No. 7 of the Handorfer Erdoelwerke Co., which is situated close to a number of productive wells, has struck the oil stratum at a depth of 181 metres.

* * *

During the past year the Vereinigte Deutsche Petroleumwerke Co. completed four new boreholes, three of which have become productive. In the fourth, no oil has been struck yet owing to the breaking of the drill. The company now has 14 wells in production by pumping. The total production last year amounted to 765 tons, against 751 tons in 1904. The company's borehole No. 4, at Hanigsen, having failed to strike oil at a depth of 165 metres, the concession there was abandoned, and the boring tools transferred to Oelheim. The company has paid a dividend of 15 per cent. for the past year.

* * *

The Norddeutsche Erdoelwerke Co., of Hanover, is obtaining oil from two wells in increasing quantities, and is delivering it into the tanks of the International Boring Co. Well No. 1 struck oil at 187 metres, No. 2 at 172 metres, with a larger yield; No. 3 is now being drilled, and is expected to strike oil at a smaller depth and with a larger yield.

* * *

In well No. 4 of the Erdoelbohrgesellschaft, Horst, the boring rod broke some months ago at 726½ metres; since then fishing operations have been proceeding, but so far without success. As the well was guaranteed by the contractors for 1,000 metres, the latter will now have to drill a second well at their own cost.

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO APRIL 24th, 1906.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since Apr. 10.	From Jan. 1.	Since Apr. 10.	From Jan. 1.	Since Apr. 10.	From Jan 1.	Since Apr. 10.	From Jan. 1.	Since Apr. 10.	From Jan. 1.	Since Apr. 10.	From Jan. 1.	Since Apr. 10.	From Jan. 1.	Since Apr. 10.	From Jan. 1.
Austria ...	—	874,560	42,720	328,770	—	11,000	—	—	—	—	—	—	—	—	42,720	1,225,330
Belgium ...	—	240	20,260	147,100	—	11,000	—	—	—	5,300	—	—	—	1,416	20,260	154,056
Borneo ...	—	210	—	—	—	—	—	—	—	1,849,150	—	240	—	—	—	1,849,600
Canada ...	—	—	—	8,000	—	20,000	—	—	—	—	—	—	—	—	—	28,000
Germany ...	14,980	761,100	85,420	557,630	—	—	—	—	—	2,320	—	—	660	5,890	101,060	1,337,420
Holland ...	—	180	—	920	—	—	—	—	—	1,012,980	—	357,400	2,800	17,080	2,800	1,418,080
Roumania ...	—	1,360,000	—	—	—	—	1,035,550	1,035,550	—	—	—	—	—	—	1,035,550	2,395,550
Russia ...	1,650,000	11,476,760	754,480	806,560	—	—	—	758,500	—	—	—	—	—	5,410	2,404,480	13,047,230
Sumatra, &c	—	—	—	—	—	—	—	—	—	976,500	—	—	—	—	—	976,500
U.S.A. ...	5,148 370	27,859,267	2,102,120	17,754,324	—	523,328	5,591,280	18,391,450	876,680	3,649,240	—	5,902,880	49,810	396,460	13,768,260	74,466,859
Other Countries	380	870	540	9 260	—	—	—	—	—	480	—	—	—	210,800	920	221,410
	6,813,730	42,333,187	3,005.540	19,612,564	—	565,238	6,626.830	20,185.500	876,680	7,525,970	—	6,260,520	53,270	637,056	13,376,050	97,120,035

The American Oil Market.

New York, Week ended April 14th.

The reports of the pipe lines for the month of March make a somewhat different exhibit, although they shew further strengthening of the statistical situation of the older producing sections in a further decrease of 436,000 barrels in the stocks in possession of the pipe lines. These strong features have been reflected in an advance of 3c. on the higher grades and 2c. on the Lima grades. There was an increase of about 370,000 barrels in the total production, of which over 300,000 barrels were of the higher grades of oil. This increase was considerably larger than was expected, even taking into account the difference of three days in the length of the two months under comparison. The deliveries during March shewed an increase of over 400,000 barrels, and this, with the decrease in stocks, constitutes the strong feature of the monthly statistical report. The increase in production is, of course, a bear factor, but as the production, even at the increase shewn, is much below the monthly average of previous years, it is not regarded as having any influence; nor is it believed the production can be kept up to this amount, notwithstanding that with improved weather and better condition of the roads in the producing regions development operations will be prosecuted with increasing vigour. The reports from the producing regions during the past week have shewn about the average number of completions, says the *Oil, Paint and Drug Reporter*, but there has been a very noticeable increase in the total number of large wells, and the average production of the new wells has been smaller, while the percentage of failures to find oil has been larger. It is reported that preparations are in progress to decrease the search for oil as soon as the roads become passable, and it is claimed that the amount of development work late this spring and early summer will greatly exceed that of a year ago. What the result will be, time will determine. In the mid-continent fields the production shews some increase, although there has been no important increase in development work. In Texas, the production shews little change, but the deliveries are increasing, and stocks are diminishing. Prices of Texas oil continue to harden, and further advances are confidently predicted.

Refined and Products.—There was some increase in the demand for refined for export during the past week, and apparently the larger stocks reported abroad are not regarded as burdensome, and will be required in addition to the regular shipments. The situation abroad has not changed but the consumption of oil appears to be steady, shewing little falling off as the season advances. The engagements for exports during the past week foot up about 200,000 barrels, all for shipment in bulk.

The price for barreled oil has remained firm at 7·60c. for New York loading, and at 7·55c. for Philadelphia loading. The principal foreign markets are easier. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. 3d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export have been in active request, and sales of over 550,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in good request, and sales of over 40,000 barrels are reported. Pennsylvania crude is quoted at 7·60c. in barrels.

Crude naphtha continues steady. For export, sales of about 5,000 barrels have been reported.

CLOSING QUOTATIONS.

Crude.

		Week ended April 7. 1906.	Week ended April 14. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk		4·70	4·70
Residuum, bbls for export		6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were:—

	Week ended April 14. 1905.	Week ended April 14. 1906.
Tiona	1·48	1·71
Pennsylvania	1·33	1·61
North Lima	0·89	0·96
South Lima	0·84	0·91
Indiana	0·84	0·91
Canadian Oil:		
Petrolia	1·29	1·37

Refined—For Export.

		Week ended April 7.	Week ended April 14.
Cargo Lots for export	per gal.	7·60	7·60
In bulk		4·70	4·70
Philadelphia loading		7·55	7·55

Refined in Cases—110 Fire Test.

	Week ending April 7.	Week ending April 14.
5,000 to 10,000	10·35	10·35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended April 7.	Week ended April 14.
120 fire test, S.W.	per gal.	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ending April 7.	Week ending April 14.
Naphtha, crude, car lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	14	14

Pennsylvania Oil Runs from April 6th to April 11th were:—April 6th, 73,936; April 7th and 8th, 80,002; April 9th, 42,856; April 10th, 66,372; April 11th, 54,832. For the month of March, 2,269,617.

The Deliveries of Pennsylvania Oil for the same dates were:—80,464; 84,213; 98,001; 65,729; 67,421. For the month of March, 2,189,894.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended April 13th and from Jan. 1, were as follows:—

	Week.	Year.	1905.
Refined, barrels and bulk	184,900	3,150,100	2,885,300
Refined, cases	586,000	4,249,000	7,754,000
Crude, barrels and bulk	43,900	517,900	288,500
Crude, cases	66,000	187,000	50,000
Naphtha, barrels	—	112,800	142,800
Residuum, barrels	40,300	288,600	243,600
Lubricating, barrels	—	106,900	49,200
Total, barrels cde. eq.	547,501	7,044,002	7,663,800

Clearances for the Week.

During the week ended Apr. 13th, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1905.
Refined	11,891,270	137,098,040	136,816,024
Crude	—	225,400	621,194
Naphtha	19,250	4,871,500	3,265,113
Residuum	—	—	3,294,915

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended April 13th	15,855,027
Total from New York, from Jan. 1, 1906	183,039,467
Same period last year	183,042,560
Decrease	3,093
From United States, week ended April 13th	25,711,276
Total from United States, since Jan. 1, 1906	334,006,143
Same period last year	325,282,236
Increase	8,723,907

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The "Review" Shipping List.

APRIL 26, 1905.

(*The following abbreviations are used in this table*:—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Sables d'Olonne	Philadelphia	L. Apr. 16
ALCHYMIST	Shoreham	London	Arr. Apr. 24
AMERICAN	Antwerp	New York	Arr. Apr. 19
APPALACHEE	Shanghai	San Francisco	L. Mar. 23
APSCHERON	Hamburg	Tyne	Arr. Apr. 17
ARAL	Hamburg	Tyne	Arr. Apr. 20
ARAS	Hamburg	—	P. Dover, Apr. 25
ARGYLL	Barry	Buenos Ayres	Arr. Apr. 17
ASHTABULA	Tyne	New York	Arr. Apr. 11
ASTRAKHAN	Tyne	Philadelphia	Arr. Apr. 16
AUGUST KORFF	London	New York	P. Lizard, Apr. 25
AUREOLE	London	Tyne	Arr. Apr. 16
BAKU STANDARD	Ibrail	Rouen	Arr. Apr. 23
BALAKANI	Philadelphia	Manchester	Arr. Apr. 22
BATOUM	Port Arthur (Texas)	Dover	L. Apr. 11
BAYONNE	Philadelphia	Savona	L. Apr. 14
BEACON LIGHT	Bilbao	Batoum	P. Gibraltar, Apr. 21
BEME	Rangoon	Bombay	L. Madras, Mar. 30
BLOOMFIELD	Bremerhaven	Tyne	Arr. Mar. 13
BORJOM	Alexandria	Batoum	Arr. Mar. 11
BRILLIANT	Philadelphia	Bremen	Arr. Apr. 21
BROADMAYNE	Rouen	Tyne	Arr. Apr. 11
BULLMOUTH	Samboe	Palembang	Arr. Apr. 11 and L. Apr. 16
BULYSSES	Kustendje	Dover	P. Const'iple, Apr. 17
BURGERMEISTER PETERSEN	New York	Hamburg	P. Scilly, Apr. 21
CADAGUA	Bilbao	Philadelphia	Arr. Apr. 19
CALCUTTA (Br. bq.)	San Francisco	Shanghai	L. Mar. 14
CARDIUM	Cardiff	Balek Pappan	L. Apr. 10
CAUCASIAN	Cardiff	Philadelphia	P. Brow Head, Apr. 25
CHARLOIS	Amsterdam	Philadelphia	P. Prawle Pt., Apr. 21
CHESAPEAKE	Avonmouth	Philadelphia	P. Fastnet, Apr. 23
CHESTER	Antwerp	Batoum	P. Consti'ple, Apr. 18
CLAM	Shanghai	—	P. Penang Apr. 20
COWRIE	Palembang	Samboe	Arr. Apr. 25
CYMBELINE	Penarth	Newport	Arr. Apr. 10
CZAR NICOLAI II.	Rouen	Batoum	Arr. Const'ple, Apr. 19
DAGHESTAN	Batoum	Philadelphia	Arr. Apr. 23
DAKOTAH	San Francisco	Shanghai	Arr. Apr. 9
DELAWARE	Liverpool	New York	Arr. Apr. 12
DEUTSCHLAND	Port Talbot	New York	Arr. Apr. 22
DIAMANT	Hamburg	Philadelphia	Arr. Apr. 22
ELAX	Newcastle (N.S.W).	—	In Lat. 8 S. Long. 125 E., Apr. 18
ELISE MARIE	Rotterdam	New York	L. Apr. 14
ENERGIE	Hamburg	Philadelphia	P. Dunnet Head, Apr. 15
ERIVAN	Philadelphia	Hamburg	L. Apr. 7
EUPLECTELA	Hamburg	Tyne	Arr. Apr. 10
EXCELSIOR	London	Philadelphia	P. Prawle Pt., Apr. 24
FRANCE MARIE	Philadelphia	Barcelona	Arr. Apr. 18
GEESTEMUNDE	Tyne	Philadelphia	P. Dunnet Head, Apr. 11
GENESSE	Manchester	Philadelphia	Arr. Apr. 18
GEORGIAN PRINCE	Liverpool	Porto Rico	L. Apr. 19
GOLDMOUTH	—	Soesoe	Arr. Apr. 23
GUT HEIL	Havana	New York	Arr. Apr. 17
HAINAUT (Dch. shp.)	Alexandria	Beyrout and Antwerp	L. Apr. 9
HARRY WADSWORTH	Port Arthur (Texas)	Liverpool	Arr. Mar. 10
HELIOS	Smyrna	Trieste	Arr. Apr. 15
HOTHAM NEWTON	Middlesbro'	Batoum	L. Consti'ple, Apr. 15
HOUSATONIC	San Francisco	Bombay	Arr. Mar. 28
JOANNIS COUTZIS	Taganrog	Piræus	Arr. Apr. 9
J. B. AUG. KESSLER	Rotterdam	Batoum	Cl. Const'iple, Apr. 15
JAMES BRAND	Thameshaven	Tyne	L. Mar. 17
KURA	Port Talbot	Novorossisk	Arr. Apr. 16
LA CAMPINE	Philadelphia	Antwerp	Arr. Apr. 19
LA FLANDRE	Ghent	Philadelphia	P. Scilly, Apr. 9
LA HESBAYE	Batoum	Antwerp	Arr. Apr. 5
LA MADALEINE	St. Louis (Rhone)	Antwerp	Arr. Apr. 7
LA VIGUESA	Marcus Hook	Gijon	L. Del. Break., Apr. 1
LACKAWANNA	Philadelphia	Calcutta	Arr. Apr. 23
LE COQ	La Pallice	Philadelphia	Arr. Apr. 24
LOUTSCH	Odessa	Barcelona	Arr. Apr. 16
LUCERNA	Novorossisk	Hamburg	Arr. Apr. 21
LUCIFER	Philadelphia	Rotterdam	L. Apr. 20
LUCIGEN	Tyne	Philadelphia	P. Dunnet Head, Apr. 23
LUCILINE	Cardiff	Philadelphia	P. Fastnet, Apr. 19
LUMEN	Philadelphia	Cette	P. Del. Break., Apr. 11
LUX	Rouen	New York	Arr. Apr. 15
MAKKAVEI	Batoum	Odessa	L. Apr. 8
MANHATTAN	Venice	Philadelphia	L. Apr. 18
MANNHEIM	Hamburg	New York	Put back after collision
MARGARETHA	Norfolk (Va.)	Flushing	P. Prawle Pt., Apr. 11
MEXICAN PRINCE	Tyne	Cienfuegos	Arr. Apr. 18
MIRA	New York	Bombay	At Port Said, Apr. 25
MUREX	Soesoe	—	L. Apr. 15
NARRAGANSETT	New York	London	P. Prawle Pt., Apr. 26
NERITE	Hankow	—	L. Apr. 18
NEW YORK	Avonmouth	Cardiff	Arr. Apr. 25
OCEAN	Philadelphia	Amsterdam	Arr. Apr. 12
ORANJE PRINCE	Tyne	Cuba	P. Lizard, Apr. 4
ORIFLAMME	Blaye	New York	Arr. Apr. 23
OSCEOLA	Norfolk (Va.)	Belize aud Bluefields	L. Apr. 9
OTTAWA	London	Philadelphia	Arr. Apr. 25
OURAL	Batoum	Antwerp	Arr. Apr. 24
PALEMBANG	Hong Kong	Palembang	L. Mar. 8
PAULA	Oporto	Philadelphia	L. St. Michael's, Apr. 16
PECTAN	London	Galveston	Arr. Apr. 20
PENNOIL	Tyne	Philadelphia	P. Dunnet Head Apr. 21
PERLAK	Calcutta	Aroe Bay	L. Apr. 4
PHOEBUS	New York	Rotterdam	L. Apr. 20
PINNA	Cardiff	Port Arthur (Texas)	P. Barry Island, Apr. 4
POTOMAC	Philadelphia	Dublin	P. Old Head of Kinsale, Apr. 26
PROMETHEUS	London	Yokohama	At Liverpool, Apr. 7
PRUDENTIA	Swansea	Kustendje	L. Apr. 4
RION	Newport	Batoum	P. Barry Island, Apr. 21
ROCK LIGHT	London	Constant'ple	Arr. Cardiff, Apr. 24
ROSSIJA	Batoum	Hamburg	P. Dardanelles, Apr. 14
ROTTERDAM	Rotterdam	New York	P. Prawle Pt., Apr. 22
RUSSIAN PRINCE	Philadelphia	Havana	P. Del. Break., Apr. 8
SALAHADJI	Singapore	Sanga Sanga	L. Mar. 27
SEMINOLE	Calcutta	San Francisco	Arr. Apr. 11
SILVERLIP	Purfleet	Hamburg	P. Southend Apr. 25
SINGU	Rangoon	Kurrachee	Arr. Apr. 1
SNOWFLAKE	Philadelphia	Hull	Arr. Apr. 25
SOPHIE	Savona	Kustendje	Arr. Apr. 20
SPONDILUS	Singapore	—	L. Mar 26
STANDARD	Stettin	Philadelphia	P. Dunnet Head, Apr. 17
STROMBUS	Cardiff	Singapore	L. Suez, Apr. 6

Vessel.	From.	For.	Latest Date and Position.
SURAM	Tyne	Batoum	P. Gibraltar, Apr. 21
SUWANEE	London	New York	Arr. Apr. 16
SVIET	Batoum	Odessa	L. Mar. 31
TELENA	Cardiff	Singapore	L. Apr. 24
TEREK	Batoum	Manchester	P. Gibraltar, Apr. 23
TIFLIS	Manchester	Batoum	P. Eastham, Apr. 22
TIOGA	Batoum	Liverpool	Arr. Nov. 25 In port, Apr. 20
TONAWANDA	Kurrachee	Newcastle	L. Mar. 30
TROCAS	BalekPappan	—	L. Ap.. 13
TURBO	Philadelphia	Santander	Arr. Apr. 20
TUSCARORA	New York	Calcutta	At Colombo, Apr. 23
TWINGONE	Rangoon	Calcutta	L. Mar. 30
VEDRA	Hamburg	Tyne	Arr. Mar. 14
VILLE DE DIEPPE	Philadelphia	Dieppe	Arr. Mar. 15
VILLE DE DOUAI	Hull	Philadelphia	Arr. Apr. 22
VOLUTE	BalekPappan	—	L. Apr. 17
WEEHAWKEN	Singapore	Bremerhaven	Arr. Apr. 21
WILLKOMMEN	Stettin	Philadelphia	L. Apr. 23
WINNEBAGO	SanFrancisco	Hong Kong	L. Apr. 5

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

April 27th, 1906.

There are no alterations to report in the price of petroleum, quotations remaining as follows :—

Russian and Roumanian, 6d. ; American, 6¼d. Water White, 7¾d.

LUBRICATING OILS

are unchanged, latest quotations being :—

American pale, £7 15s. to £9 10s.
American dark cylinder, from £7 10s.
American filtered cylinder, from £11.
Shellene, £5.

TURPENTINE.

American turpentine has fallen in price since our last report, and is now quoted for Spot 46s., May to June 45s. 6d., and July to December 43s. 9d.

LIVERPOOL OIL MARKET.

April 24th.

Refined oils are quiet, but sellers now quote 6½d. for Russian and 6⅝d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, April 24th.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, April 24th.

Standard White is quoted at 7·55.

RUSSIA.

Baku, April 25th.

The substantial figure of the output of crude oil in March has had a moderating effect on the tone of the Baku oil market, which is gradually returning to normal conditions. The business done is mostly for prompt delivery. There are no important offers of oils for future delivery. The prices are: Light crude oil, spot, 26-26½ copecs per pood; kerosene, in ships, future delivery, 29½ copecs; residuals, spot, 28 copecs per pood.

BELGIUM.

Antwerp, April 23rd.

The petroleum market is stagnant, and sales are made only for immediate requirements. Price of Standard White, spot, 19½ francs; April, 19¾ francs; May, 20 francs.

GERMANY.

Hamburg, April 24th.

The kerosene market is weak. The price of American Standard White is 7·10 marks per 50 kilos.

ROUMANIA.

April 23rd.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	3·40-3·50
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery	3·00· —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octroi tax of 12 fcs. per 100 kilos.

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
„ sp. gr. 0·720-0·725	8·00- 9·00
„ sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

Bombay, Aprll 7th.

Market unchanged on prices (except for Cobra brand, which is 2 annas lower than last week) : —

American, "Snowflake," 150 deg.	Rs. 6	0	2
„ Chester, 125 deg.	4	8	2
„ Monkey Brand, 125 deg.	4	2	2

Telegraphic Address:—"OLEINE."

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED APRIL 9TH, 1906—

Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
April.	LONDON—			
4	Scott's Wharf	Lub.	4,000	New York
4	Vacuum Oil Co.	,,	30,160	,,
4	A. Brown and Co.	,,	4,000	Hamburg
5	Worthington and Boler	,,	4,720	Philadel.
5	Mordaunt Bros.	,,	12,800	,,
6	E. J. Dyer	,,	8,400	New York
6	Anglo-American Oil Co.	,,	5,000	,,
6	J. Barber & Co.	,,	800	Hamburg
6	T. H. Lee	,,	1,570	,,
7	Consolidated Pet. Co. (Rion)	Lamp	818,160	Port Arthur
7	Asiatic Petroleum Co.	Benz.	46,500	Pulo Sambre
7	W. H. J. Alexander	Lub.	2,400	Philadel.
7	Trinidad Lake Asphalt Co.	,,	2,400	,,
7	Anglo-American Oil Co.	,,	6,800	,,
7	W. Balchin	,,	24,800	,,
7	Snowdon, Sons and Co.	,,	2,770	,,
9	G. W. Sheldon and Co.	,,	1,510	New York
9	J. Barber and Co.	,,	1,400	Hamburg
9	Shell Transport Co. (Timsah)	Fuel	86,400	Amsterdam
	LIVERPOOL—			
4	Vacuum Oil Co.	Lub.	2,400	New York
4	Geo. B. Taylor	,,	45,720	,,
5	Vacuum Oil Co.	,,	5,040	,,
5	Liverpool Storage Co.	,,	12,560	,,
5	,,	,,	5,200	,,
6	J. W. Jones	,,	2,400	,,
6	W. H. Jennings	,,	1,740	Fiume
6	Meade-King, Robinson & Co.	,,	63,320	Philadel.
6	Worthington and Boler	,,	1,520	,,
6	Vacuum Oil Co.	,,	30,000	,,
7	E. Harrison and Co.	,,	4,000	,,
7	A. Hopps and Sons	,,	8,050	,,
7	,,	,,	2,570	New York
7	Geo. B. Taylor	,,	4,200	,,
9	,,	,,	19,680	,,
9	W. B. Dick and Co.	,,	10,330	,,
9	Crew, Levick Co.	,,	32,160	Philadel.
9	Pickfords	,,	450	Hamburg
9	W. H. Jennings	,,	2,000	,,
9	Penwarden and Jackson	,,	250	Antwerp
	BRISTOL—			
6	W. Smith and Co.	Lub.	61,880	New York
6	,,	Lamp	5,960	,,
6	Collins and Co.	Lub.	2,900	,,
9	Pickfords	,,	2,400	Hamburg
	CARDIFF—			
7	Homelight Oil Co. (Cymbeline)	Lamp	810,000	Batoum
	GRIMSBY—			
9	Sutcliffe and Son	Lub.	640	Antwerp
	HULL—			
5	Hull and Neths. S.S. Co.	Tar Oil	2,160	Rotterdam
5	Thos. Wilson, Sons and Co.	Lub.	680	Hamburg
5	,,	,,	560	Antwerp
	MANCHESTER—			
4	Morton and Sons	,,	1,600	Philadel.
4	Meade-King, Robinson & Co.	,,	32,400	,,
4	,,	Lamp	9,600	,,
April.				
4	Anglo-Amer. Oil Co. (Genesee)	Lub.	471,000	Philadel.
5	J. T. Fletcher and Co.	L. Gr.	1,420	Antwerp
5	Homelight Oil Co. (Cymbeline)	Lamp	837,000	Batoum
5	Worthington and Boler	Lub	1,050	Philadel.
5	R. Steinmann and Co.	,,	2,400	Hamburg
7	Liverpool Storage Co.	,,	1,600	,,
	NEWCASTLE—			
5	Tyne-Tees S.S. Co.	,,	3,640	Antwerp
	GLASGOW—	,,	400	Hamburg
5	Anchor Line	,,	61,320	
5	Burrell and Son	,,	12,000	New York
	LEITH—			
5	W. Graham Yooll and Co.	Lamp	2,180	Trieste
7	,,	,,	2,140	Hamburg
7	J. Currie and Co.	Lub.	440	,,
	LERWICK—			,,
6	Olna Whaling Co.	,,	200	Tonsberg
	DUBLIN—			
6	Anglo-Amer. Oil Co. (Deutschland)	Lamp	1,311,320	New York
	Total for Week		4,954,170	

FOR THE WEEK ENDED APRIL 17TH, 1906—

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
	LONDON—			
10	Fielder, Hickman and Co.	Lub.	7,200	New York
10	A. Brown and Co.	,,	3,400	Philadel.
10	Geo. L. Woodcock	,,	1,920	Fiume
10	M. Samuel and Co.	Ker.	170	Singapore
11	Mordaunt Bros.	Lub.	2,000	Philadel.
11	H. Finkler and Co.	,,	20,000	Trieste
11	Anglo-Ameriean Oil Co. (Aureole)	Gas	1,377,930	Philadel.
14	Fielder, Hickman and Co.	Lub.	10,000	,,
14	Scott's Wharf	,,	2,000	New York
14	A. Brown and Co.	,,	4,000	Hamburg
17	London Oil Storage Co.	,,	2,180	,,
17	Wilkins, Campbell and Co.	,,	4,560	Philadel.
17	Snowdon, Sons and Co.	,,	2,670	,,
17	Anglo-American Oil Co.	,,	54,000	,,
17	McDougall and Bothrom	,,	2,000	,,
17	Scott's Wharf	,,	2,000	New York
17	Fielder, Hickman and Co.	,,	21,560	,,
17	George Sheldon and Co.	,,	680	,,
	LIVERPOOL—			
10	Crew, Levick and Co.	,,	2,840	Philadel.
10	Vacuum Oil Co.	,,	3,600	New York
10	Liverpool Storage Co.	,,	38,240	,,
10	,,	M. Col.	4,000	,,
11	Meade-King, Robinson & Co. (Tiflis)	Lub.	441,290	Batoum
12	,,	,,	10,800	Baltimore
12	,,	,,	25,800	Philadel.
12	Worthington and Boler	,,	600	,,
12	S. Hopps and Sons	,,	10,490	,,
12	W. B. Dick and Co.	,,	9,080	,,
12	Crew, Levick and Co.	,,	15,330	,,
17	Liverpool Storage Co.	,,	13,600	New York

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Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
April.				
17	Vacuum Oil Co.	Lub.	1,000	New York
17	Geo. B. Taylor	,,	76,320	,,
17	Huxley and Co.	Crude	260	Hamburg
	Bristol—			
10	Ford and Canning	Lub.	2,400	New York
11	H. R. James and Sons	,,	5,800	,,
11	Anglo-Bosphorus Oil Co.	,,	2,200	Hamburg
11	Pickford's	,,	320	,,
11	W. Smith and Co.	,,	34,840	New York
11	,,	Lamp	10,000	,,
11	H. R. James and Sons	Lub.	4,000	,,
11	,,	M. Col.	2,000	,,
11	Collins and Co.	,,	3,000	,,
11	,,	Lub.	2,000	,,
11	First Anglo-Russian Oil Co.	,,	4,000	,,
17	W. Smith and Co.	,,	43,000	,,
17	,,	Lamp	16,000	,,
	Hull—			
10	Hull & Netherlands S.S. Co.	Tar oil	1,600	Rotterdam
10	Thos. Wilson, Sons and Co.	Lub.	1,200	Hamburg
11	,,	,,	700	New York
11	Anglo-American Oil Co.	,,	93,100	,,
11	W. Gilyott and Co.	,,	4,800	,,
11	Thos. Wilson, Sons and Co.	,,	3,000	Antwerp
11	,,	,,	1,040	Hamburg
17	Homelight Oil Co. (Aras)	Lamp	1,300,000	Batoum
	Manchester—			
10	Manchester Liners	Lub.	3,100	Philadel.
11	Meade-King, Robinson & Co.	,,	56,920	,,
11	Geo. B. Taylor	,,	204,360	,,
11	Pure Oil Co.	,,	2,400	,,
11	Crew, Levick and Co.	,,	28,300	,,
11	Geo. B. Taylor	,,	120	Hamburg
14	D. Currie and Co.	,,	6,100	,,
	Middlesboro—			
10	J. J. Sutherland	,,	2,400	Antwerp
	Sunderland—			
10	Gen. Pet. Co. (Euplectela)	Lamp	280,000	Philadel.
	Dundee—			
11	D. Alexander and Sons	,,	400	Hamburg
	Glasgow—			
10	Burrell and Son	Lub.	800	Fiume
11	Anchor Line	,,	76,800	New York
16	,,	,,	46,800	,,
16	J. and A. Allan	M. Col.	6,250	Philadel.
16	,,	Lub.	85,650	,,
	Grangemouth—			
11	J. Currie and Co	Tar oil	400	Hamburg
11	Graham-Yooll and Co.	Lamp	4,000	,,
	Lieth—			
11	Graham-Yooll and Co.	,,	2,180	,,
11	Henderson and McIntosh	Lub.	61,560	New York
	Lerwick—			
11	A. Mathiessen	,,	130	Sandefjo
11	,,	Lamp	210	,,
12	Consolidated Pet. Co. (Caucasian)	Gas	1,000,000	New York
	Total for Week		5,585,400	

FOR THE WEEK ENDED APRIL 24TH, 1906—

Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
	London—			
18	Duckholm and Co.	Lub.	410	Stockholm
18	T. H. Lee	,,	750	Hamburg
18	L. and India Dock Com.	,,	2,400	New York
18	Anglo-American Oil Co.	,,	21,960	,,
18	Mordaunt Bros.	,,	2,500	Philadel.
19	Consolidated Petroleum Co. (Excelsior)	Gas	1,260,000	New York
19	General Petroleum Co.	Lamp	775,200	Pt. Arthur
20	G. and H. Green	Lub.	1,300	New York
20	Anglo-American Oil Co.	,,	46,000	Philadel.
20	,, ,, (August Korff)	Spirit	876,680	New York
20	General Petroleum Co.	Gas	1,035,550	Kustendje
23	W. Balchin	Lub.	10,000	Hamburg
23	Mordaunt Bros.	,,	16,800	New York
24	Fielder, Hickman and Co.	,,	26,240	,,
24	Humphrey and Co.	,,	200	,,
24	J. Barber and Co.	,,	700	Hamburg
	Liverpool—			
18	E. H. Kellogg and Co.	,,	2,000	New York
18	W. Gibson and Sons	Lamp	2,050	Boston
19	Meade-King, Robinson & Co.	Lub.	18,200	Pt. Arthur
19	,, ,,	,,	5,600	New York
April.				
19	Valvoline Oil Co.	Lub.	2,670	New York
19	Cunard Steamship Co.	,,	127,010	,,
19	,,	M.Colza	1,760	,,
19	E. H. Kellogg and Co.	Lub	4,000	,,
21	W. Woodcock	,,	2,400	Baltimore
21	Meade-King, Robinson & Co.	,,	14,480	,,
23	,, ,,	,,	8,000	Trieste
23	Geo. B. Taylor	,,	36,400	New York
23	Valvoline Oil Co.	,,	1,850	,,
24	Worthington and Boler	,,	200	,,
24	J. T. Fletcher and Co.	,,	1,340	Antwerp
24	Pickfords, Ltd.	,,	300	Hamburg
24	Meade-King, Robinson & Co.	,,	19,960	,,
	Bristol—			
19	Anglo-American Oil Co. (Chesapeake)	Lamp	1,244,000	Philadel.
19	Anglo-American Oil Co.	Lub.	163,870	,,
19	,, ,,	Lamp	2,201,250	New York
19	Pickfords, Ltd.	Lub.	200	Hamburg
19	H. R. James and Sons	,,	21,000	New York
19	,, ,,	M.Colza	6,200	,,
23	,, ,,	,,	22,600	,,
23	,, ,,	Lub.	19,800	,,
23	W. Smith and Co.	Lub.	55,680	New York
23	Collins and Co.	M.Colza	4,000	,,
23	,,	Lub.	6,000	,,
	Grimsby—			
21	J. Sutcliffe and Son	Lub.	560	Antwerp
	Hull—			
19	Thos. Wilson, Sons & Co.	,,	5,000	,,
19	Wilsons and N. E. Railway Shipping Co.	,,	1,800	,,
19	,,	,,	2,000	Hamburg
23	Anglo-American Oil Co.	,,	27,540	New York
	Manchester—			
19	Bramwell Fern & Co. (Tiflis)	,,	124,440	Batoum
19	W. Hodgson and Co.	,,	9,470	Hamburg
19	Colledge Roy and Co.	,,	3,000	,,
19	Crew, Levick & Co.	,,	1,800	Antwerp
19	Manchester Liners	,,	1,860	Philadel.
19	George B. Taylor	,,	166,720	New York
19	,,	,,	800	Philadel.
19	Lanc. and York. Ry. Co.	,,	1,080	New York
19	Liverpool Storage Co.	,,	24,950	,,
19	Meade-King, Robinson & Co. (Tiflis)	,,	178,750	Batoum
19	George B. Taylor	,,	101,720	New York
19	Bramwell Fern and Co.	,,	3,750	,,
21	Consolidated Petroleum Co. (Balakani)	Gas	1,313,000	Philadel.
21	Meade-King, Robinson & Co.	Lub.	20,000	Hamburg
	,,	,,	3,200	New York
21	Diamond Lubricating Co.	,,	2,000	,,
23	Liverpool Storage Co.	,,	1,080	Hamburg
	Newcastle—			
19	Furness Withy and Co.	,,	12,800	New York
19	C. Hassell and Son	,,	36,240	,,
19	Tyne-Tees S.S. Co.	,,	280	Hamburg
19	,,	Tar Oil	1,200	Rotterdam
19	,,	Lub.	2,720	Antwerp
	Plymouth—			
23	Anglo-American Oil Co. (August Korff)	Lamp	619,870	New York
	South Shields—			
19	Consolidated Petroleum Co.	,,	350,000	Batoum
	Glasgow—			
19	Burrell and Son	Lub.	12,000	Trieste
19	J. and A. Allan	,,	40,600	Philadel.
	Grangemouth—			
19	W. Graham Yooll and Co.	Lamp	4,000	Hamburg
	Leith—			
19	Geo. Gibson and Co.	Lub.	1,640	Antwerp
19	W. Graham Yooll and Co.	Lamp	1,090	Hamburg
19	,,	,,	1,130	,,
20	J. Currie and Co.	Lub.	400	,,
21	,,	,,	120	,,
21	W. Graham Yooll and Co.	Lamp	2,180	,,
	Belfast—			
19	Consolidated Petroleum Co. (Caucasian)	Gas	640,350	New York
	Total for Week		11,790,650	

APPLICATION JUST PUBLISHED.

Improvements in the application of oil materials, disinfectants, and the like to roads and other surfaces.—Henrich Otto Brandt, Manchester, Lancashire.—No. 6618 of 1905.

This relates to the method of preparing an emulsion of oily material, and distributing the same over road and other surfaces, and consists in treating a proportionately small quantity of the oily material with an emulsion agent and water or aqueous solution in a rapidly rotating drum or by means of a rapidly rotating disc, or by steam or air jet or otherwise, for the production of an emulsion of the oily material with the water or aqueous solution and simultaneously or immediately applying the emulsion so formed to the road or other surface before the emulsion separates or the oily particles coalesce.

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Romano-American Petroleum Co.—An extraordinary of the Romano-American is to be held at Bucarest, on April 28th, with a view to raise the capital from 5,000,000 to 12,500,000 francs.

The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XIV. *(New Series.)* May 12th, 1906. No. 372.

Editorial Notes.

Production and Consumption.

It is safe to say that never before have such efforts been put forward in the various oil fields of the world, with a view to bring about a substantial increase in the production of petroleum as is the case at the present time. Whether we take America, Russia, Roumania, Galicia or the Far East, we see unmistakable evidence of unprecedented energy in oil field work, and what is more, that work for the most part is being very successful. This especially applies in the case of America and Roumania. In the former country, one began to wonder where the decline lately registered from all the Texas fields would stop, for since the beginning of the present year, production had fallen off in many localities to an alarming extent. The past few weeks, however, have witnessed a most pronounced change, and the wells in Humble, Saratoga, Spindle Top and other petroliferous areas seem to have a new lease of life, for the most recent advices shew very considerable increases. Added to this, a rising market, and it is no surprise that the incentive to drill has been readily accepted on every hand.

A Glance at Roumania.

Roumania is forging ahead rapidly as a petroleum producing country, and the reports which we publish in this issue furnish ample evidence of this. The various fields are now being most actively exploited, and many prolific borings have been completed of late. It is unnecessary here to comment upon these excepting to say that they tend to shew that so far the great value of Roumania's mineral wealth is as yet practically unappreciated. But turning from production, which is now continuously increasing, to the export trade, we again see very healthy signs. For the first quarter of this year the petroleum exports, when compared with those for a corresponding period a year ago, shew an increase of quite 75 per cent., the output of illuminating oil having been more than doubled since this time last year. This can be indicative of a highly satisfactory state of affairs, not the least significant feature in which is the fact that large quantities of the Roumanian product are being sent to this country. In this respect it is interesting to note that during the first three months of this year England has taken over 15,000 tons of Roumanian oil, while last year England's first shipment took place about May.

The Burmah Oil Company's Report.

Though not so highly satisfactory as some of its predecessors, the annual report of the directors of the Burmah Oil Co. contains much which will be pleasureable reading to the company's shareholders. First and foremost there has been the rate war, which must have had a very great effect upon the profits of the company during the year under review but this competition has now been terminated by the agreement to which we referred some months ago in the Review. Then the report briefly mentions that the new development work has not turned out as successful as was hoped, which in the absence of further explanation may mean a great deal. If we remember correctly, the company had a new issue of capital about a year ago, and the additional half-a-million was in part to furnish working capital for new developments, and now that the directors report that upon some of these new territories work has been abandoned, it occurs to us that a little more information upon this matter might not be out of place or void of interest. With regard to the year as a whole, apart from the matters we have already mentioned, the company had passed through another fairly successful period in its history, which shews how that with good management, despite severe drawbacks, dividends can be earned in these competitive days.

America's Petroleum Exports for March.

The exports of petroleum from America during March established a record, and though the quantity in gallons was exceeded some months ago, the value of the products shipped abroad was the greatest ever known, the total valuation being close upon $8,000,000. With the compilation of the statistics for March, it is possible to arrive at some opinion in regard to the growth of America's petroleum export trade during recent months. The Goverment returns are made up from June to June, and thus the detailed statistics for the three quarters are now available. Comparing the exports of petroleum and it products for the nine months, we see that for the period named, America has sent abroad 130,000,000 gallons more that during the same period of the preceding year, while the increase in revenue has been about $2,600,000. America can therefore be said to be more than holding her own in the world's oil trade.

A Government Fights the Petroleum Industry.

That the American Government is bent upon crippling the petroleum industry, in spite of official statements to the contrary, is again evident, for the sweeping order of the Interior Department stopping all development work on oil leases situate in certain Indian reservations in Oklahoma and Indian Territory cannot but be taken as an organised attack. The oil producer has been looked upon as legitimate prey for all sorts of purposes by the Legislatures of various States, and Congress has taxed both the producer and refiner to raise revenues, but this is the first time a national administration has raised its hand against it. The men who have invested their money in leases from the Indians will if the present order is allowed to stand, be deliberately robbed of their holdings. We quite agree that where it is shewn that any fraud or injustice has been practiced, the decision to demand that the lease should be forfeited ought to be upheld, but the order as a whole is a most sweeping one.

RUSSIAN AND ROUMANIAN NOTES.

Baku Production.—The production of crude oil at Baku during the first half of April amounted to 19,273,479 poods, of which 5,990,000 poods was produced at Bebe-Aibat.

The Naftalan Petroleum Co. has completed its first financial year 1905 with a net profit of 269,779 roubles, out of which 240,000 roubles have been applied for paying a dividend of 10 per cent. on the capital of 2,400,000 roubles.

The Romano-American Co. are drilling a well at Baicoi, near the road leading to the railway station. The Trajan Co. is also starting a well on the land acquired from Mr. Langeveld, whilst a number of other firms have started or are about starting wells in this field.

The Water Flush System.—The commission which is now engaged in elaborating regulations for the use of water flush drilling systems in Roumania has now been charged by the Ministry of Domains with the preparation of regulations fixing the minimum distance between wells and groups of wells.

The Allard and Blank Syndicate, who own petroleum concessions in various parts of the Roumanian oil fields, are transforming themselves into a limited liability company, with a capital of 3,000,000 francs. The general management of the business will be entrusted to Mr. Lewis Hamilton.

Petroleum Products at Nijni-Novgorod.—The stocks of petroleum products at Nijni-Norgorod on the 1st April (o.s.), excluding those held by the Moscow-Nijni Railway, were :—Kerosene, 465,000 poods; crude oil, 206,000 poods; residuals, 5,580,000 poods. In 1905, on the same date, the stocks were :—Kerosene, 1,707,000 poods; crude oil, 471,200 poods; residuals, 11,850,000 poods.

Russian Exports.—The exports of petroleum products from Russia during the first two months of 1906, compared to the corresponding period of 1905, according to the customs statistics, were as follows :—

	1906.	1905.
Total export of illuminating oil, heavy benzine, etc.	2,503,000	10,754,000
Including :		
Via Warsaw	25,000	67,000
,, Novorossisk	799,000	4,719,000
,, Batoum..	1,585,000	5,804,000
Not including :		
Via Baku	235,000	358,000
To Finland..	21,000	64,000

ROUMANIAN PETROLEUM EXPORTS DURING THE FIRST THREE MONTHS OF 1906.

The exports of petroleum products from Roumania during the first three months of 1906, compared to the corresponding period of 1905, were as under :—

	1906, Tons.	1905. Tons.
Crude, Gas Oil and Distillate ..	8,739	6,005
Illuminating Oil	37,799	17,447
Benzine	14,704	11,357
Total	61,242	34,809

The figure for the first quarter of 1906 must be considered as highly satisfactory shewing as it does an increase against the corresponding period of 1905 by 26,433 tons, or 75 per cent. By far the greatest part of the increase, namely, 20,352 tons falls on illuminating oil.

The exports to various countries were as follows :—

	Crude, Gas Oil and Distillate.	Illum. Oil.	Benzine.	Total. 1906.	1905.
France	816	11,831	8,143	20,790	26,327
England	4,125	7,376	4,079	15,580	—
Germany	13	10,271	2,078	12,362	4,379
Turkey	190	6,228	23	6,441	74
Austria-Hungary.	3,154	—	365	3,519	3,879
Italy	11	2,006	—	2,017	22
Other Countries..	430	87	16	533	128
Total.. ..	8,739	37,799	14,704	61,242	34,809

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Improvement in Texas Production.—A general improvement was noted in the output of the Texas-Louisiana producing districts during the first half of April, and at the commencement of the third week the daily output was estimated at 59,770 barrels. Both Jennings and Humble shew decided improvements, that in the first case being brought about by the bringing in of two new wells which improved the daily yield by about 5,000 barrels. The daily production of the Humble territory has gone up nearly a thousand barrels, while in Saratoga and Spindle Top less pronounced increases are noticeable.

THE OPERATIONS OF THE BAKU REFINERIES.

STATISTICS POR OCTOBER, NOVEMBER, AND DECEMBER, 1905 (in poods).

I.—Manufacture of Illuminating Oils.

Distillation.

	Submitted to Distillation.			Products Received.				
	Crude.	Other Products.	Total.	Kerosene.	Residuals.	Other Products.	Loss.	Fuel used.
October	3,769,624	—	3,769,624	1,080,033	2,428,081	143,742	117,768	378,485
November ..	11,356,722	—	11,356,722	3,183,632	7,487,989	376,161	308,940	611,648
December ..	8,744,986	—	8,744,986	2,176,461	5,767,346	642,194	158,985	437,508

Refining

	Submitted to Refining.			Refined Products Obtained.			Chemicals used.	
	Kerosene.	Other Distillates.	Total.	Kerosene.	Other Products.	Loss in Refining.	Acid.	Soda.
October	1,335,199	55,210	1,390,409	1,294,481	50,693	45,235	7,292	2,439
November ..	2,715,246	16,148	2,731,394	2,622,586	14,681	94,127	13,684	4,919
December ..	2,103,227	8,156	2,111,383	1,913,876	7,857	189,650	13,115	4,506

II.—Manufacture of Lubricating Oils.

Distillates Received.

	Machine Oil.	Spindle Oil.	Cylinder Oil.	Goudron.	Solar Distillates.	Residuals.	Other Distillates.	Loss in Distilling.	Fuel used.
October	12,852	3,410	6,571	80,355	5,400	—	—	90,635	29,741
November ..	524,345	97,630	31,756	192,813	583,450	396,670	8,575	100,726	213,459
December ..	441,696	66,770	27,579	171,754	212,588	272,795	2,200	37,675	239,717

Refined Products Received.

	Spindle Oil.	Machine Oil.	Cylinder Oil.	Loss in Refining.	Chemicals used. Acid.	Soda.
October	39,209	91,862	5,469	14,513	1,462	657
November	21,117	288,777	10,124	39,506	3,256	1,523
December	74,703	318,896	14,456	54,097	4,040	1,968

The output of benzine distillates in December amounted to 9,382 poods against 18,442 poods in November, and none in October. The output of refined benzine was 5,493 poods, against 3,866 poods in November, and 2,221 poods in October. The total output of solar oil distillates in November was 556,993 poods, against 633,150 poods in November, and 94,321 poods in October.

LIQUID FUEL FOR LOCOMOTIVES.

The Institution of Mechanical Engineers Discuss the Subject.

At the last meeting of the session of the members of the Institution of Mechanical Engineers, which took place a few days ago at Westminster, Mr. Louis L. Greaves, late locomotive superintendent of the National Railway of Tchuantepec and now of the Buenos Ayres Great Southern Railway, presented a paper dealing with the now important subject of liquid fuel for locomotives.

The author stated that the fuel question in Mexico had always been a serious one for railroads, in consequence of their being practically no coal and the high cost of firewood. Hence had arisen a scheme for the full development of the Mexican oil fields with the view to the use of liquid fuel for the entire railroad system The cost of converting a coal burning engine to an oil burner was £118. Engines were supplied with oil for auxiliary station tanks in much the same way as water is supplied. The author gave tables from which it appeared that the cost per engine mile with oil for passenger service was 5·5d., with coal 6·5d., with wood 6·7d. For freight service the figures are:—Oil, 10·7d.; coal, 13·8d.; wood, 11·6d. Tables giving comparison of performance of locomotives with different fuels for six months ended December 31st, 1904, shewed that passenger engines cost per train mile:—Oil, 5·8d.; coal, 6·7d.; wood, 7·4d. Freight engines:—Oil, 11·4d.; coal, 15·7d.; wood, 12·1d., these figures having been compiled from careful observation of actual results. If it were contended, said the author, that the prices charged for coal were high, he would point out that any improvement in facilities which would reduce the cost of coal would also reduce the cost of oil. On the subject of burners, of which several types had been experimented with, the author obtained the best results in all essential points from the Best burner. One of the most important points to observe in oil burning boilers was the condition of the fire-brick work. There were, in his opinion, incidental advantages in using oil fuel quite apart from anything due to consumption. The author was of opinion that if oil fuel had been adopted in countries within easy reach of the United States or other oil fields, the price of oil would not be increased beyond a point which would enable oil producers to compete successfully with coal.

The discussion was opened by Mr. George S. Jones, who said that he had had opportunities of making experiments in the use of oil fuel in locomotives abroad on two occasions. The first was in 1885, when some oil wells were sunk in Baluchistan. The locomotives were ordinary wood and coal-burning engines, and the trials were made on a level piece of road, on the North Western Railway of Scinde, and each description of fuel was used separately on ordinary work. It was found, when the comparative values of the fuels were taken, that 1 lb. of oil equalled 1·42 lb. of English export coal. The same description of oil was subsequently used in stationary boilers for some years, with very nearly the same result; 1 lb. of oil equalling 1·46 lb. of local coal of good quality. He had observed that the the oil required to do the work of a ton of coal varied considerably, due to the oil containing a quantity of water, which could not be separated by mechanical means. It would be interesting to know whether this fact had been observed by the author, and, if so, how he had dealt with it. The second series of experiments was made in 1899, with Borneo oil supplied by the Shell Company, and with heavier engines than those used on the first trial, but fitted in the same way. The trials were conducted on the same piece of road. One pound of this oil was found to equal 1·4 lb. of English coal. The consumption in goods trains was 0·761 lb. of oil to 1 lb. of coal, or a proportion of 1 ton of oil to 1·31 tons of coal. This was very near the figure given by the author in the paper.

Mr. Lawford H. Fry, of the Baldwin Locomotive Works, with a view to supplementing the paper, exhibited three diagrams shewing the systems of oil-burning largely used on locomotives in the Western and South Western States of America.

Mr. H. W. Garratt said that he had some experience with oil-burning locomotives. He had constructed a form of burner in which he had aimed at simplicity, and had endeavoured to control the air supply with the greatest care, as, in his view, this had much to do with breaking up the oil. There was a hole through the fire-box, similar to that in Mr. Holden's design. A sliding sleeve controlled the admission of steam at the annular nozzle. The oil entered through a little casting shewn, and a ring of inlets for the air constituted the means for the first breaking up. The points for the first, second and the third supply of air were indicated on the drawing. With this burner Mr. Garratt succeeded in getting perfect combustion; and, taking the actual cost of working with coal at 35s. a ton, and oil at 45s. a ton, with the same class of engine, doing the same work, the coal cost 29·48 cents (Peruvian money), as against 15·9 cents for oil. The oil used was from the wells of the London Pacific Petroleum Co.

In reply to a question from Mr. L. Pendred, whether the holes in the fire-box were at the sides, as in the case of Mr. Holden's engine, Mr. Garratt said that these holes were through the back plate, pointing torwards the chimney, and about 14 in. above the fire-grate. The fire-grate was bricked in the usual way. He could not say anything positive about the final economy in regard to the durability of the fire-boxes.

Mr. C. H. Wingfield said that the peculiarly insinuating nature of petroleum, to which the author had referred, necessitated a quality of plate work for the tanks equal to that put into boilers. It was this which made the construction of oil-tank steamers the speciality of a very few firms, who had aquired the necessary experience. Many shipbuilders of first-class standing in other respects had undertaken work of this description, only to cause endless annoyance by the frequent necessity for subsequent repairs. In some experiments he had made with Russian petroleum refuse oil, he found that with best Welsh coal, used in a fire-box of ample size, he had to burn 66 per cent. greater weight than with oil, in order to get a given evaporation; whereas, with presumably poor coal, the author's figures shewed that the oil performance could be balanced by only 21 per cent. more coal in the case of passenger locomotives, or 33 per cent. more in the case of goods locomotives. Mr. Urquhart found he had to burn from 97 per cent. to 100 per cent. greater weight of coal than its equivalent of oil. This was with poorer coal than the speaker had used.

The author had called attention to the importance of good bricklaying. With ordinary forced draught Mr. Wingfield had found the addition of a little salt to the water used in mixing the fire-clay employed as mortar caused it to slightly vitrify when the furnace was at work, thus welding the mass of brickwork together. He believed this plan had since become a standard practice in the Royal Navy. He did not quite grasp the meaning of the author's statement that copper was superior to steel by reason of its greater adaptability for expansion and contraction; it expanded about 50 per cent. more, but the speaker considered that that was scarcely an advantage. Mr. Best's burner had been mentioned in the paper, and the author had stated that it gave the most satisfactory results; and the speaker pointed out that the United States Naval Liquid Fuel Board was reported to have said, in 1904, "the output with this burner exceeded that of any other burner tried during the tests." Steam was admitted through the upper branch, the oil being allowed to flow into the spoon-like receptacle below. As the steam issued from its nozzle, it swept the oil from the surface, which was kept constant for the purpose. The object of pointing the oil orifice in an upward direction was to avoid trouble caused by the orifice becoming clogged by carbonisation of the oil.

Mr. Abrahams, of the Shell Transport Co., said he would be glad to note that considerable progress was being made on foreign railways in respect to the application of oil for fuel for driving locomotives. He would refer to rates of consumption of oil that had come under his notice in connection with trials on locomotives, torpedo boats, and stationary engines. According to his experience, every pound of oil used would have an evaporative efficiency equal to that of 1·75 lb. of coal. The calorific value of oil fuel was taken as 19,000 units, while the calorific value of Cardiff coal was about 12,000 to 13,000 units. With an ordinary stationary boiler 1 lb. of oil was found to evaporate 15·7 lb. of water, while with an ordinary Lancashire boiler, using coal, the evaporation never exceeded 7·8 lb. of water per pound of coal; with oil fuel 16·5 lb. of water were evaporated in a water-tube boiler. On the occasion of the first Admiralty trials with the "Surly," under the direction of Sir John Durston, they had succeeded in evaporating 15·9 lb. of water per pound of fuel used, although in that instance coal was used in conjunction with the oil fuel. It was only quite recently that the Admiralty had freed themselves of the belief that in order to get efficiency coal must be used in conjunction with the oil. His company had something like forty steamers, in which, with a single exception, not a pound of coal was used for driving the machinery. As he had stated, the efficiency of oil was 1·7 times greater than that of coal.

Mr. H. F. Donaldson, of Woolwich, said that the paper had reminded him of some trials of one of the Shell steamers, which he had attended some years ago, when oil fuel was first burnt. There was something attractive about the appearance of an oil fire; and although there was, on the trip to which he referred, a little back flare at starting, yet the impression left on his mind by the experience was that it would be as well to be to the front in investigating the use of oil fuel, so that he might, if necessary, start with this fuel on a large scale. Money, however, would decide whether oil fuel could be adopted in this country. In order to test the matter he installed, by the courtesy of the Shell Company, a tank to work with one stationary boiler, or it might have been two. Careful measurements were taken of the oil and water, and of coal and water in adjoining boilers. There was certainly back-flare at starting, just as in the stokehold of the steamer. This was rather alarming, inasmuch as it lifted the boiler practically off its seat, although it did not cause explosion. As he had indicated, money was the governing factor, and comparing the price of oil—which, according to the paper, was 24s. to 24s. 6d. per ton—with the cost of coal, the economy appeared doubtful. In the trials which he had carried out, the coal was about 12s. to 15s. per ton in the bunkers, and at the price at which the Shell Company were then prepared to sell oil it could not be made to pay. He did not know whether the cost of oil had come down to any extent, but he certainly did not see any prospect of it being reduced to bring it into competition with coal in this country.

Mr. S. F. Stackard, of Messrs. J. A. Curle, Ltd., of Homer Road, Victoria Park Road, South Hackney, detailed his experience, as a glass-manufacturer, in connection with the use of liquid fuel. Speaking of London, he would say that manufacturers had for some time been experimenting with liquid fuel for melting their particular material, and he thought oil fuel was also being applied for metallurgical purposes. He concurred in the objection which some previous speakers had raised that the liquid fuel supply was to some extent in the hands of monopolists, with the consequence that, as a rule, an increased demand for the article might bring a corresponding rise in price. This, instead of assisting development of the industry, served to hamper it. Nevertheless, at his works they were still persisting in the application of liquid fuel, and had attained fairly successful results. An advantage of great importance in London was the complete absence of smoke; the burner which he had used was very satisfactory in that respect; moreover, it did not carbonise or clog. With a little multitubular boiler, not lagged, they obtained an evaporation of 13 lb. of water to 1 lb of oil; it would be admitted, in view of the extravagant form of boiler, that this result was good. With a Lancashire boiler, the evaporation reached should be about 15 lb. of water to 1 lb. of oil. He thought that in a water-tube boiler, with a properly constructed fire-box, a still better result should be attained. He had given his card to the Secretary, and if any members present were interested in the application of liquid fuel to metallurgical purposes, they might find that a visit to his works would repay them. He agreed with the previous speaker that experiments with liquid fuel were very fascinating, and they were also costly. The danger of back-firing undoubtedly existed, especially with steam burners; but with care and experience this could be reduced to a mimimum. The experience they had obtained with a great variety of liquid-fuel burners shewed that their was no comparison, so far as the spraying medium was concerned, between compressed air and steam. With all deference to the Shell Transport Co. he considered that for machine purposes, compressed air would undoubtedly be the medium of the future for spraying the oil into the furnace, not only because the use of steam necessitated additional condensing plants for the production of feed-water, but because the use of compressed air secured a much better combustion. He believed that, with almost any burner, compressed air was 15 per cent. better than steam as a spraying medium. It was sometimes thought that an advantage was got from burning the gases of dissociated steam, but as much energy was absorbed in splitting the water into gases as was represented by the heat of these gases in combustion. In one experiment made at his works, a stream of compressed oxygen was conducted through the burner; the resulting heat was intense, approximating to that of the Voltaic arc. They had been told that the flame would melt the burner, but it survived the ordeal quite well.

Mr. J. F. Robinson said that in looking at the drawings of oil-burning locomotives it had struck him as curious that the same form of fire-box was used for both oil and coal-burning; in that he thought there was something wrong. In the coal-burning locomotive—and especially with narrow-gauge engines—designers were driven, much against their will, to adopt all sorts of abnormal shapes, so as to get the required grate area and heating surface. But he could see no reason for adopting the same strange constructions in the case of the oil-burning locomotive. In his opinion, the whole matter should be considered on the basis of first principles, and should not be treated in relation to the data accumulated from experience with coal-burning locomotives.

Mr. C. M. Hunter, referring to Mr. Stackard's remarks on the use of compressed air for vaporising the oil, said he did not think the practice had, so far, been tried on any locomotive, but it would be interesting to see the effect. He had been carrying out experiments with compressed air in the neighbourhood of London, and the results were encouraging.

IS THERE PETROLEUM IN CAMEROON?

The existence of petroleum somewhere on the coast of Cameroon, in German West Africa, was first known in German colonial circles about the end of 1904. The oil outcrops were discovered at several spots near the village of Hogobaba, some 8 kilometres east of Duala, also near the Bomono Creek, about 14 kilometres north-west of Duala. Several samples of the oil were analysed by the Geological Survey at Berlin, with satisfactory results. In order to determine the extent and productivity of the strata, a boring rig was sent by the hastily-formed Cameroon Mining Co., who also engaged the district geologist, Dr. Monk, to carry out a trial boring. At a depth of 800 metres, the well drilled near Hogobaba had not reached the oil stratum, and owing to great difficulties encountered, the work had to be stopped. No other operations have so far been attempted, and the question of the existence of petroleum in paying quantities in Cameroon still awaits solution.

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended April 28th was 266,000 poods, or 4,290 tons; and for the week ended May 5th was 273,000 poods or 4,403 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended April 29th was 283,000 poods, or 4,564 tons; and for the week ended May 6th was 276,000 poods or 4,451 tons.

Spies Petroleum Co., Ltd.—The output for the week ended April 29th was 123,650 poods, or 1,994 tons. The output for the week ended May 6th was 121,890 poods, or 1,965 tons.

The European Petroleum Co., Ltd.—The production for the week ended April 29th, 1906, was 106,268 poods, or 1,173 tons; and for the week ended May 6th was 114,630 poods or 1,848 tons.

PATENTS.

Applications for Patents and Patent Applications recently published relating to the Petroleum Industry.

Specially contributed by Messrs. EDWARD EVANS & Co., of 27, Chancery Lane, London, W.C., and 105, Colmore Row, Birmingham, Consulting Engineers, Chartered Patent Agents and Enrolled Patent Attorneys of the United States.

Applications Filed in Great Britain.

Improvements in Oils used for Lubricating Purposes.—Henry Carter and James Tyrrell Newell, London. No. 9202 of 1905.

Improvements in the Treatment of Lubricating and other Oils.—Alfred Haenflein and Ludwig Kornfeld, London. No. 9206 of 1905.

Improvements in Motor Spirit Oil or the like.—William Houghton Beardwood and Thomas Henry Rochford, Dublin. No. 9132 of 1905.

Improvements in refining Mineral Oil.—James Noad, London. No. 9872 of 1905.

An Improved Process for Purifying Petroleum Oils.—Edward Williams Wynne and John Macmillan Scott, Liverpool. No. 10248 of 1906.

Applications Published in Great Britain.

Improvements in Means for Delivering Oil and other Liquids.—James Caldwell Stelfox, London. No. 25385 of 1905.

This relates to means for delivering oil, comprising a cylinder adapted to receive changes of the oil and having an inlet and an outlet for the oil which are alternately closed, a boiler adapted to contain a given quantity of water and to be placed alternately in communication with the oil cylinder and with the escape passage, and a supply of fluid under pressure, the arrangement being such that oil will be displaced from the oil cylinder by water under pressure whilst water is escaping from the water chamber and that when the fluid pressure is cut off and the oil outlet or delivery closed, oil will drive the water therefrom into the water chamber until the latter is filled, whereupon the admission of oil will cease.

Improvements in Pneumatic Motors for Drills or like Tools.—Henry Harris Lake, of London; (Auroro Automatic Machine Co., U.S.A.). No. 7119 of 1905.

This relates to a pneumatic motor provided with a revolving valve comprising in conjunction with a valve seat an augularly movable valve disc the stem of which extends into the fluid supply pipe and is adapted to be actuated by means of an angularly movable sleeve mounted on said supply pipe.

Oil Separator.—Charles H. Gameson. No. 818,431.

This relates to an oil separator or filter for steam motor cars and other vehicles, locomotive or stationary engines or the like, consisting of a steam chamber with screw cap and aperture, an exhaust pipe entering said chamber, a separating box contained within the steam chamber, and connected to the exhaust pipe strips of metal arranged crosswise inside the separating box, holes in the lower part of the said separating box, and side wings above the holes.

Improved Process and Apparatus for Recovering Volatile Solvents.—Edmond Delhotel, of France. No. 9441 of 1905.

This relates to a heated chamber for evaporating volatile solvents, and consists of a heat exchanger composed of tubes for passage of heated and cooled air on the known counter-current principle, and a condenser, comprising three-parts for cooling air in succeesive stages, suitably combined together for the purpose of circulating in known manner the air that issues from the heated chambers, first through the heat exchanger, then through the condenser, then back thorough the heat exchanger into the heated chamber.

* * *

The Pirate Oil Co.—Under the above title, a company has recently been formed in Texas and is now preparing to put down a test well on the Mott Farm, Galveston Island. The capital stock has been placed at $20,000.

THE NEW PETROLEUM AND OZOKERITE FIELD OF NIEBYLOW, IN GALICIA.

From the earliest times traces of oil have been known to exist at Niebylow, on the river Lomnica, in the Kalusz district, but more especially along the rivulets Czerleny and Turowa. The peasants of the neighbourhood dug shallow pits, from which they drew a thick crude oil which had collected, and this they used as cart grease. On a tract called "Ropienka" there are still to be seen several hundred hand wells full of water, while apart from this there are at Niebylow strong salt and sulphur springs, which are known to always accompany petroleum and ozokerite deposits.

When the Galician petroleum industry began to grow, attention was directed to Niebylow as a very promising field, and in a geological respect closely resembling Boryslaw, but more so, as in the adjoining districts of Ripne and Majdan the well known petroleum men, the late Messrs. Szczepanowski and Perkins obtained considerable results by means of shallow borings.

The first to begin systematic exploration was the late Mr. Bronislaw Deskur, who sunk a 40 metre shaft on the Czerleny river, in which, at a depth of 30 metres, ozokerite veins were encountered. Unfortunately the capital at his disposal was not large, and his death put an end to further explorations.

Since then the Niebylow lands, particularly those belonging to the village community, were the subject of numerous negotiations, but owing to the rather complicated local conditions of ownership of these lands, these negotiations for a long time failed to bring about any arrangements.

In 1905 a company having the title of the Niebylow Syndicate was formed with the object of acquiring all the lands lying on the oil belt at Niebylow, and at the present moment the company possesses about 2,500 acres of communal and peasant lands which are mostly situated in the miocene salt formations (analogous with those at Boryslaw-Tustanowice), and also in eocene and oligocene formations, such as are found on the Mraznica-Schnodica- Urycz line.

In regard to this oil field, Prof. R. Zuber writes as follows:—"It is situated in the political district of Kaluz, about 21 kilometres south-west of the Krechowice railway station at the foot of the Eastern Karpathians. On the lands of the villages of Niebylow and Sloboda-Niebylowska, there are numerous considerable traces of oil on the rivers Czerleny and Turowa. As far back as 1883, I observed these outcrops and came to the conclusion that the oil traces originated in two distinct geological formations, viz., from the dark or brown oligocene, so-called menilite shales and partly in the miocene grey shales and sandstone, which inclose salt and gypsum and which are found exclusively on the outer base of the Karpathians, and are briefly designated salt clay or salt formation. I definitely ascertained then that the oil oozing from the salt clay is rich in paraffin. As it was proved in practice that the oligocene strata in the Karpathians always yield satisfactory results, as well as that the salt formation frequently contains considerable ozokerite veins, I expressed my opinion that this field should be explored for ozokerite in the same manner as the well-known ozokerite deposits in Borylaw, Dzwiniacz ond Starunia. Such explorations were carried out at a later date, and proved that in the direction of Sloboda Nieblowski salt formations of the same kind as in the above-named three localities exist, and that these formations contain many thick layers of pure ozokerite accompanied by oil and gas traces.

As the miocene strata at Niebylow presents the most complete analogy to the prolific Boryslaw field, and at the same time also possesses flat lying strata, I must therefore declare it to be most suitable for deep borings for petroleum, and as a most promising oil field."

The Niebylow syndicate have acquired the right of developing eight petroleum plots, and intend to form subsidiary companies for exploring and exploiting these lands. One plot of these lands of an area of 312 acres was taken over from the syndicate by Dr. Stefan Freund, who undertook to sink the first well to a depth of 1,000 metres. This well was started on the bank of the Czerleny river last March, and provision was made for carrying this well to 1,200 metres by the Canadian system. The rights have also been acquired for laying a pipeline to the railway station at Krechowice. The cost of drilling to a 1,000 metres is estimated in round figures at 200,000 kronen. The rapidity of the drilling may be judged from the fact that after passing through a 30-metre thick surface ground, 15 to 20 metres were drilled daily, and after that the drill entered into the strata of the upper oligocene, and by the 15th March it reached 100 metres, while at the time of writing the well was already 200 metres deep. Deeper down it is expected to strike sandstone, under which there should be the oil. The exploitation of this new field is carried on systematically, according to a pre-arranged plan.

Preparations are already being made for starting the second borehole on the opposite bank of the river, and there is every indication now that this new petroleum and ozokerite field will become a new centre for the development of the petroleum industry in Galicia.

* * *

DETAILS OF BAKU PRODUCTION IN JANUARY, 1906.

The following details of the Baku production of crude oil in January are supplied in the latest issue of the *Neftiannoie Dielo*:—

	Number of Wells in Exploitation.	Production (in poods).				Average per Well per Day.
		By Baling.	By Spouters.	Casual.	Total.	
Balakhany	352	4,123,681	—	22,104	4,145,785	411
Saboontchi	376	9,778,268	—	199,828	9,978,096	973
Ramany	126	5,346,719	4,793,300	54,932	10,194,951	2,973
Bebe-Aibat	165	9,905,508	—	20,000	9,925,508	2,149
Total in January, 1906	1,019	29,154,176	4,793,300	296,864	34,244,340	1,208
,, December, 1906	868	18,952,088	803,000	194,491	19,949,579	969
,, January, 1905	1,518	43,444,452	1,271,000	316,372	45,031,824	1,055

Apart from the above, there was produced at Binagadi, from 12 wells, 15,170 poods of oil.

The production by spouters in January was obtained from the following wells:—

Field	Firm.	No. of Plot.	No. of Well.	Production. Poods.
Ramany	Mantascheff and Co.	58	283	2,473,500
,, ...	Nobel Bros.	32	350	27,600
,, ...	,, ...	140	400	2,292,200
	Total			4,793 300

Batoum and its Petroleum Trade during 1905.

IMPORTANT CONSULAR REPORT.

The annual report of Mr. Stevens, the British Consul at Batoum, on the commerce of the district during 1905, contains important reference, as might be expected, to the petroleum trade of the port during the period under review.

By way of introduction he points out that the downward movement in the trade of Batoum, which began so far back as the middle of the year 1904, went from bad to worse in January 1905, and towards the month of April the situation became exceedingly acute. Trade declined to such an extent that most, if not all, of the industrial establishments of the town were compelled to bring their activity to a complete standstill and to discharge all their workmen. Much of this deplorable condition of affairs is to be atttibuted to the continued disturbances throughout Russia and in particular to the prevalent disorders in the Caucasus, which were maintained with greater intensity in the year 1905 as compared with the troubles of 1904, rapidly bringing about a state of chaos and with it industrial and commercial ruin to the country.

On three occasions during the period under review the town of Baku witnessed a series of events, the ghastly horrors of which, and the appalling loss of life occasioned thereby, it will take very many years to erase from memory.

In February, racial conflicts between Armenians and Tartars broke out at Baku, in which a very large proportion of the labouring classes employed at the oil fields took an active part. These struggles were followed by strikes of a more or less prolonged duration at various periods of the first half of the year, the troubles reaching their culminating point towards the month of August, 1905, when an industry of the greatest value and magnitude and probably the most extensive one in the Russian Empire was practically wrecked by incendiarism and otherwise destroyed by infuriated mobs of workmen to an extent which has necessitated the reconstruction and complete reorganisation of the whole of the wonderful and costly machinery installations and other appliances which existed at the oil fields, and a very long time may elapse before the output of oil by the wells near Baku reaches the volume which the production of crude petroleum had attained at the end of the year 1904. Towards the close of October and in the first three days of November last, fresh troubles broke out at Baku, and were accompanied by considerable loss of life and destruction of property, but on this occasion the oil fields were not affected to such a great extent, although the trade of the town suffered very severly in consequence.

A perpetual state of commotion was likewise maintained in many parts of the Caucasus outside Baku and Batoum, including the manganese ore territory in the government of Kutais, the city of Tiflis, the towns of Elisavetpol, Erivan, Kutais, Ozourgheti and several other industrial and commercial centres. At these places the incessant activity of the turbulent elements reacted most disastrously upon the economic condition of the country, the population of which, in consequence of the prevalent financial crisis, is on the verge of such a state of pauperism never before witnessed in the Trans-Caucasus. The municipalities of the localities referred to are, without a single exception, bankrupt, many people are also in a very bad plight and are compelled to liquidate their business, seeing that they are unable to meet their financial obligations, and the peasantry throughout the country are in the greatest distress.

Under the above conditions and in view of indications that the population may possibly maintain a state of unrest throughout the country, it is difficult to expect in the near future the return of industry and trade to the normal conditions that obtained before the recent outbreak.

The foregoing remarks will give an idea of the influences which so disastrously affected the industries and trade of the Caucasus during the past year, and which both at Batoum and elsewhere served manufacturers as a substantial argument in favour of closing their factories.

The prosperity of the shipping trade of the port of Batoum is in a great measure dependent on the successful prosecution of the mineral oil industry at Baku. During the past year, as has already been mentioned, the petroleum industry went through a series of calamities, each more disastrous than the other, and consequently shipping at the port of Batoum suffered in proportion to the diminution of the productive power of the oil wells on the Apscheron peninsula.

Under the influence of the deplorable state of affairs that obtained at both ends of the Trans-Caucasian railway, the quantity of mineral oil for shipment to foreign countries was reduced to a mimimum, and beginning from the month of May, the number of steamers usually visiting the port commenced to drop off until, towards the autumn of the year, one or two of the companies running regular lines had ceased to send their boats to Batoum, and British shipping dwindled down to figures which have never yet been recorded since first the port became a visiting centre for shipping, some 19 to 20 years ago, and this can be seen from the fact that only 75 British steamers, of the aggregate tonnage of 172,681 tons, entered, and 76 steamers of 175,150 tons, cleared from the port of Batoum. The arrival and departure of tank steamers at this port has become almost an event of the past, although hopes are entertained that a resumption of oil-carrying trade by vessels of this class may take place by the middle of the present year. The number of tank steamers of all nationalities that entered and cleared at the port of Batoum in 1905 was 158, so that nearly 50 per cent. of the bulk oil was taken away from the port in British hulls.

So far as concerns the resumption of the carrying trade for petroleum cases, I do not expect, says Mr. Stevens, that many of the manufacturers of cases contemplate resuming work at their factories during the present year. At any rate there are no indications that an early resumption of work is possible. One or two of the smaller or more unimporant factories may recommence with the manufacture of a limited number of cases to meet the demand for petroleum in markets situated in the immediate neighbourhood of Batoum, but I doubt whether there is any likelihood that their activity will in any way effect European or Far Eastern markets.

In consequence of the closing of the big factories during the past year, an enterprising individual at this port adapted a small building as a temporary factory for manufacturing a limited number of cans for carrying petroleum—150 to 200 per diem—and by means of small coasting craft succeeded in establishing a fairly remunerative trade with ports situated along the Anatolian coast. The machinery of this factory, however, was not in a position to produce a sufficient quantity of cans to meet the demand for petroleum at the nearest Turkish ports, and illuminating oils from America, amounting, I am told, in the aggregate to about 20,000 cases, had to be imported at Samsoum and Trebizond during the year.

Apparently owing to the impossibility of arriving at any satisfactory arrangement with the factory hands here, one of the more extensive case and can manufacturing firms decided last year to transfer its business to Alexandria, to which place some of the machinery belonging to one of its Batoum factories was removed, and, together with a consignment of new machinery imported from America, was installed in the Alexandria factory. It is stated that this installation is capable of producing 10,000 cases and 20,000 cans per diem, and the oil required for filling them is imported in a tank steamer belonging to belonging to the firm in bulk from Batoum. It is also reported that another firm has acted pretty much on similar lines at one of the Italian Adriatic ports. Such measures may have far reaching consequences for the only industry of any importance at the the port of Batoum, and it is quite possible that the once prosperous industry which, during its better days, furnished permanent employment, at a low estimate, for 6,000 factory hands and a very large number of dock labourers, may never be rehabilitated at Batoum in its former prosperous and extensive proportions.

The annual return of exports shews a marked falling-off in the shipments of petroleum products from the port during the year 1905, which were over 50 per cent. less than the quantities exported in 1904.

The Vice-Consul at Baku having furnished an exhaustive report on the oil industry of Baku for the past year, I shall, therefore, limit myself to making a few remarks on that portion of the mineral oil industry and trade that concerns Batoum.

The total quantity of mineral oil that was brought to Batoum during the year 1905 from Baku by pipe line and tank cars was :—

	Poods.	Barrels
Kerosene	17,480,710	1,892,250
Machine oil	4,324,119	470,010
Solar oil	2,058,875	221,510
Mazoot	819,119	81,911
Distillate	456,876	49,650
Spindle oil	519,340	56,450
Cylinder oil	156,295	16,990
Total	25,743,334	2,788,771

As compared with the totals for the years 1904-1902 :—

Year	Quantity.	Decrease.	
	Poods.	Poods.	Barrels.
1904	80,486,885	55,743,541	5,950,380
1903	81,081,942	55,338,598	6,015,060
1902	77,229,357	51,486,030	5,596,310

The stocks of oil at Batoum at the close of the year were :

	Quantity.	
	Poods.	Barrels.
Kerosene	2,834,901	308,140
Distillate..	18,804	2,040
Solar oil..	430,993	46,850
Machine oil	33,035	14,460
,, distillate	19,642	2,790
Cylinder oil	19,859	2,160
Lubricating oil	14,192	1,540
Mazoot	207,213	20,721
Crude oil	5,597	650
Total	3,584,236	399,261

The bulk of the balance of kerosene in stock at Batoum on the last day of 1905, and most of the other oils referred to have been exported since January 1st 1905, so that until fresh oil commences to arrive from Baku, the Batoum stocks are practically depleted, except some very insignificant quantities of kerosene which remain for local consumption.

The following quantities of petroleum products were exported from Batoum during the period under review :

	Number.	Poods.
Cases of kerosene 1·8 poods net weight	1,564,832	4,075,352
Cans of kerosene 0·9	1,398,728	
Petroleum products in bulk		32,687,773
Total		36,763,125

Or in cases and cans 442,760 barrels, and in bulk, 3,553,302 barrels, which, when compared with the exports of oil in previous years, give the following results : —

	Quantity.	Decrease.	
	Poods.	Poods.	Barrels.
1904	77,095,527	40,332,402	4,383,950
1903	77,128,348	40,365,223	4,387,520
1902	80,475,995	43,712,870	4,838,350

The above comparisons serve as striking evidence of the abnormal condition of affairs that prevailed throughout the year in the petroleum trade of the Caucasus.

Periodical strikes of employés on the railway impeded the regular working of the pipe-line on the Mihailovo-Batoum section of the Trans-Caucasian line. Notwithstanding the irregular intervals at which this pipe line worked during the year, the quantity of kerosene which was pumped through was as much as 17,408,910 poods, or 1,892,250 barrels.

The progress made with the works connected with the extension of the pipe-line during the period under review was very great, and the line has practically been completed, the pipes for the whole distance between Baku and Batoum having been laid. The pumping machinery at the different pumping stations has been installed and is ready to start work at a very short notice. On the Michaelovo-Batoum section a considerable number of pipes have been holed by the revolutionaries and have thereby been rendered useless, but this damage, it is reported, will not take long to repair and the line will in all probability be at work shortly.

THE OPERATIONS OF THE BAKU REFINERIES IN 1905.

DETAILED STATISTICS.

We are now in a position to publish the complete official statistics dealing into the operations of the Baku refineries in 1905, which in view of the generally disorganised state of the petroleum trade during the period are of particular interest. Compared with 1904, these details shew that the effects of the recent crisis on the refining industry have been even greater than on the producing industry.

The total quantity of crude and other oils submitted to distillation in the kerosine refineries was as under as compared with that of 1904:

	1905. Poods.	1904. Poods.
Crude Oil	285,750,219	471,678,208
Light Gasolene ...	2,073,947	1,931,614
Refined Kerosene	—	43,790
Residuals ...	—	526,265
Kerosene Distillate	805,735	511,487
Total ...	288,629,898	474,691,364

The falling off in 1905 against 1904 therefore amounts to 186,061,466 poods or 39 per cent.

The output of distillates was as follows:—

Distillates of—	1905. Poods.	1904. Poods.
Kerosine	67,637,730	145,434,298
Light Gasolene ...	10,253,635	10,841,461
Light Solar Oil ...	1,591,127	2,290,177
Heavy Solar Oil ...	—	82,970
Astral and Astraline...	23,450	30,648
Pyronaphtha	184,755	148,381
Residuals	200,748,255	302,277,657
Benzine	93,634	84,707
Total products ...	280,532,586	461,390,299

Of the two principal products the greatest decline has occurred in the output of kerosine distillate, which is pre-eminently an export product, namely, 77,796,568 poods or 53½ per cent., whilst residuals, which go exclusively to the home market have suffered less severely, namely, 101,529,402 poods or 33½ per cent only. The total output of all products shews a decline of 180,857,713 poods or 39·2 per cent.

The yield of the various products from the crude material was as under:—

	1905. per cent.	1904. per cent.
Kerosene	23·43	30·66
Residuals	69·55	63·68
Other Products	4·22	2 86
Loss in distilling	2·80	2·80
	100·00	100·00

The above table clearly shews the result of the efforts of the refiners to avert the liquid fuel famine by increasing the yield of residuals at the expense of the kerosene.

The quantities of various oils used as fuel at the kerosene refineries was as under:—

	1905.	Per cent.	1904.	Per cent.
Crude Oil ...	2,712,718	25	3,562,163	20
Residuals ...	4,446,416	40	9,514,209	53
Light Gasolene...	3,509,935	35	4,941,556	27
Light Solar Dis.	15,037		—	
Heavy Solar Dis.	78,084		1,860	
Kerosine Dis. ...	153,921		927	
	10,915,511	100%	18,020,715	100%

The total quantity of fuel used in proportion to the quantity of oil distilled was in 1905, 3·43 per cent. against 3·79 in 1904. A further analysis of the figures of the various oils used as fuel shews that last year in view of the great demand for residuals for the interior, the refiners have considerably reduced the use of residuals as fuel at the refineries and increased in proportion the use for this purpose of crude and other oils. Thus whilst in 1904 out of the total quantity of oils used as fuel 20 per cent. was crude, 53 per cent. residuals and 27 per cent. other oils, in 1905 the proportions were:—crude 25 per cent., residuals 40 per cent. and other oils 35 per cent.

The following quantities of distillates obtained in the kerosene distilleries were submitted to refining:—

Distillate of—	1905.	1904.
Kerosene	64,904,153	145,836,212
Light Solar Oil ...	181,179	229,851
Astral and Astraline...	22,150	30,648
Pyronaphtha	136,954	148,381
Total	65,244,436	146,245,092

The quantities of refined products obtained were:—

	1905.	1904.
Kerosene	62,990,812	141,343,264
Light Solar Oil ...	148,884	197,255
Astral and Astraline...	21,528	29,711
Pyronaphtha	129,579	142,918
Total	63,290,803	141,713,148

The loss in refining was as follows:—

	1905.	1904.
Quantity of Oil lost ...	1,953,633	4,531,944
Percentage of Oil treated	2·99 p. cent.	3·09 p. cent.

The reduced percentage of loss shews that last year in view of the high prices of oils, greater care was exercised in their treatment.

The quantities of chemicals, sulphuric acid and caustic soda used in refining the above quantities of oils were:—

	1905.		1904.	
	Quantity in Poods.	Per cent. on Oil Treated.	Quantity in Poods.	Per cent. on Oil Treated.
Sulphuric Acid	343,541	0·53	864,143	0·59
Caustic Soda	126,385	0·19	318,063	0·22

In the lubricating oil refineries the following quantities of residuals and other oils were submitted to distillation:—

	1905.	1904.
Residuals	34,774,324	54,757,891
Heavy Solar Distillate	—	410
Cylinder Oil Distillate...	35,117	65,341
Refined Machine Oil ...	—	54,925
Total	34,809,441	54,878,567

The decrease in the quantity of oil treated in the lubricating ore refineries in 1905 against 1904 amounts to 20,069,126 poods or 36½ per cent.

The output of distillates was as follows:—

	1905.	1904.
Light Solar Distillate ...	7,031,727	11,841,135
Heavy Solar Disillate ...	3,169,699	3,415,029
Spindle Oil	1,022,427	2,119,856
Machine Oil	8,794,903	14,316,347
Cylinder Oil	398,547	516,194
Viscosine	15,686	57,547
Vaseline Oil	73,800	133,520
Goodron	5,540,617	7,687,298
Lubricating Oil Residuals	7,030,740	11,655,176
Sabonaphtha	4,895	2,547
Total ...	33,083,041	51,744,649
Loss in distilling ...	1,726,400	3,133,918
	34,809,441	54,878,567

The proportionate output of various lubricating oils on the crude material used was as follows:—

	1905. per cent.	1904. per cent.
Light Solar Oil	20·90	21·57
Heavy Solar Oil	9·10	6·22
Spindle Oil	2·94	3·86
Machine Oil	25·26	26·12
Cylinder Oil	1·15	0·94
Goodron	15·92	14·01
Lubr. Oil Residuals	20·19	21·24
Other Products (Viscosine, Vaseline and Sabonaphtha)	0·28	0·33
Loss in distilling	4·96	5·71
	100·00	100·00

The quantity of various oils used as fuel in the lubricating oil refineries was:—

	1905.	1904.
Crude Oil	335,662	114,937
Residuals	4,146,367	5,463,185
Light Gasoline	228,298	514,171
Heavy Solar Distillate ...	644,713	748,324
Goodron	188,133	266,908
Kerosene Distillate ...	43,000	—
Lubricating Residuals ...	—	42,580
Total	5,586,173	7,150,105
Percentage of fuel used in oil distilled	16·04 p. cent.	13·02 p. cent.

The following quantities of lubricating oil distillates were submitted to refining:—

	1905.	1904.
Spindle Oil	1,003,418	2,104,685
Machine Oil	8,540,134	13,184,842
Cylinder Oil	295,923	346,515
Total	9,839,475	15,636,042

The output of refined lubricating oils, was as under:—

	1905.	1904.
Spindle Oil	898,682	1,882,543
Machine Oil	7,685,889	11,816,498
Cylinder Oil	254,784	288,756
Total	8,839,355	13,987,797

The loss in refining amounted to 1,000,120 poods or 10·16 per cent. against 1,648,245 poods or 10·54 per cent.

The quantities of chemicals used in the refining of lubricating oils were:—

	1905. Quantity.	Per cent. on oil treated.	1904. Quantity.	Per cent. on oil treated.
Sulphuric Acid ...	242,112	3·47	643,783	4·12
Caustic Soda ...	46,560	0·47	64·816	0·41

The following quantities of oils were submitted to distillation in the benzine refineries:—

	1905.	1904.
Light Gasolene... ...	888,621	1,156,979
Benzine Distillate ...	5,200	27,827
Total	893,821	1,184,806

The output of distillates from the benzine refineries was as under:—

	1905.	1904.
Benzine Distillate ...	255,164	381,467
Heavy Gasolene ...	601,905	311,467
	857,069	1,125,501
Loss in distilling ...	36,752	59,305

The result of the distillation in per cent. is shewn below:—

	1905. per cent.	1904. per cent.
Benzine Distillate ...	28·57	32·22
Heavy Gasolene ...	67·40	62·84
Loss in distilling ...	4·03	4·94
	100·00	100·00

The results of the refining of benzine are expressed in the following figures:—

	1905.	1904.
Benzine Distillate submitted to refining ...	264,774	332,609
Refined Benzine obtained	257,049	321,277
Loss in refining	7,725	11,332
Chemicals used:—		
Sulphuric Acid	7,910	7,532
Caustic Soda	1,824	1,616

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THE BURMAH OIL COMPANY, LTD.

ANNUAL REPORT.

The annual report of the Burmah Oil Co. shews that the gross profit on the working for 1905 including £7,778 brought forward, was £324,663. After deducting income-tax, depreciation, insurance, etc., there remains a net profit of £194,341. After placing £50,000 to the general reserve fund, the directors recommended the following dividends for the second half-year: On the six per cent. first preference shares, 7⅕d. per share (equivalent to 6 per cent. per annum); on the six per cent. second preference shares, 3s. per share (equivalent to 6 per cent per annum on the £5 per share carrying dividend); on the ordinary shares, 1s. per share (equivalent to 10 per cent. per annum), free of income-tax. There then remains £10,591 to be carried forward. These amounts make, with the interim dividends, in the case of the first preference shares and ordinary shares, 6 per cent. and 10 per cent. respectively for the year, and in the case of the second preference shares, 6 per cent. on the £5 per share carrying dividend from April 30 to December 31, 1905. The addition of £50,000 will bring up the general reserve fund to £240,000, in addition to the £80,000 standing at capital reserve. The low price to which kerosene oil had been driven by the action of importers of foreign oils into India at the date of the directors' last report continued until late in the year. This must have caused severe losses to the importers in question, while it greatly curtailed the profits of this company. The war of rates was eventually terminated by an arrangement concluded at the end of October last with the Asiatic Petroleum Co., under which that company recognised the Burmah Oil Company's prior right to market its kerosene oil in Burmah and India. From October last a gradual rise in price was established; the arrangement has been working satisfactorily, and it is hoped that it will continne so to do; but the accounts now under review have, of course, received only small benefit from it. Meantime nothing has been allowed to interfere with the policy of vigorously developing and exploiting the oil fields. This work has shewn, on the whole, most satisfactory results. The new territories explored have not turned out as well as was hoped, and work on several fields has been abandoned, the expenditure on them being written off in the year's accounts. On the other hand, boring and development in the older properties of the company have far more than compensated for these disappointments by definitely proving the richness of a very large area of hitherto untested land.

THE BAICOI OIL FIELD = = = = OF ROUMANIA.

A Rich Oil Strike.

Well No. 6 of the Steaua Romana.

The recent rich strike of oil in well No. 6 of the Steaua Romana at Baicoi has directed the attention of all petroleum people to the Baicoi oil field, where great activity now prevails. Baicoi has the great advantage of being situated on the railway and close to the town of Ploesti, with which it is connected by means of an excellent road. Drilling operations have been proceeding at Baicoi for some years, and although a great deal of capital has been expended and oil struck in the past, the practical results have been very meagre.

A peculiar feature of the Baicoi oil field distinguishing it from either Bustenari or Moreni is that the wells are placed in the midst of the village.

View in the Baicoi Oil Field.

Well No. 6 of the Steaua Romana, which has now brought Baicoi to the front, struck oil at a depth of 232 metres, about the end of last February. Up to the end of March it had produced 6,150 tons of crude oil. This well proves the petroliferous value of the part of the Baicoi field situated south of the Cotoi-Baicoi lake, which had already been proved by the Langeveld well situated in the immediate vicinity of the Steaua No. 6.

The Langeveld well has for several years been drawing from a rich oil stratum, about 50 metres higher than the stratum struck by Steaua Romana well.

The non-success of the majority of the wells drilled at Baicoi is certainly directly attributable to the geological structure of the oil basin, which appears to be in communication with two salt deposits, part of two neighbouring anticlinals separated by a deep synclinal depression. The layers filling in this depression are of the Candesti formation, whilst the strata covering up the salt massives are of the levantine and pontic formation.

The oil at Baicoi as well as throughout the whole of the Gura-Ocnitza-Moreni-Tinta zone, which all form one oil belt, is concentrated in strata with vivipara bifarcinate. The direction of the strata is almost straight from west to east, and the incline seems to go exclusively to the north. This incline appears to be connected with the arrangement of the anticlinals at Baico, which in the south are overturned into a fold resulting in a unique incline to the north of the stratification.

This fact seems to be confirmed by the recent results obtained in well No. 6 of the Steaua Romana which has passed under a thick layer of gravel, characteristic of Baicoi, up to 120 metres through alternating strata of clay with sand and gypsum, and sandstone and salt, belong-to the salifierous miocene formation. It then penetrated into the pontic strata with unios and cardites, which strata containing the oil deposit of the well No. 6.

The first gases and traces of oil appeared at 150, 180 and 200 metres; more considerable traces made themselves apparent at 225 metres. No water was encountered in the deeper parts of the well. The water in the gravel was shut off by a hermetic column of casing of 400 mm. diameter, which column was fixed at 105·85 metres depth. The other columns forming the casing of the well are: –

The rivetted column, 550 mm. diam., fixed at 26·70 m.
" " 450 " " 45 m.

The hermetic columns are of 16 inches, 14 inches, and 12 inches diameter, and were stopped at 105·85 m., 215·40 m, and 231 m. respectively.

The drilling of well No. 6 at Baicoi was started on the 28th of June, 1905, and completed on the 11th January, 1906, a period of 197 days. After deducting non-working days, there are left 171 working days, which works out at an average of 1·35 metres drilled per day.

Although the well first began to spout on the 11th of January, it could not be cleared and prepared for exploitation before the 26th of January, 1906, when it began to make great and successive eruptions. During the first days of February the well attained a yield of 300 to 400 tons per day. On some days the yield went up even as high as 500 tons.

On the 21st of February the well was completely burnt down, but it was quickly rebuilt and put in a condition to supply a regular daily output of 200 to 300 tons. At the time of writing the well was being cleared of obstructions.

Baicoi Railway Station.

Until quite recently operations at Baicoi were very restricted and the results for 1905 may be briefly summarised as follows: —

The Steaua has been operating two boreholes, and obtained a total production of 90 tons of oil.

Messrs. A. Congreve (the Roumanian United Petroleum Co., Ltd.) sunk three hand wells, deepened a borehole, and operated two other boreholes, which yielded a total output 1,002 tons.

Messrs. Stoenescu and Co. had two hand wells and one boring, with a total production of 340 tons.

Mr. Gheorghin sunk in 1905 two hand wells, from which he extracted 340 tons of oil.

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{11}{16}$-$\frac{13}{16}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	3/9-4/3
,, ,, ..	£650,000 $5\frac{1}{2}$% Pref.	£1	7/3-7/9
Bibi-Eybat Petroleum Co. ..			10/0-11/0
Californian Oilfields	£250,000 Ord.	£1	$5\frac{1}{2}$-$5\frac{3}{4}$x.d.
European Petroleum	£550,000 Pref.	£1	3/0-4/0
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	88-93
Russian Pet. & Liquid Fuel ..	£500,000 $6\frac{1}{2}$% Pref.	£1	12/6-13/6
,, ,, ...	£600,000 Ord.	£1	12/3-13/3
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	$3\frac{5}{8}$-$3\frac{7}{8}$
,, ,, ...	£575,000 Ord.	£1	9/0-10/0
Shell Transport & Trading ..	£2,000,000	£1	25/9-26/9
,, ,, ,, ..	£1,000,000 Pref.	£10	$9\frac{1}{4}$-$9\frac{1}{2}$
Spies Petroleum Company ..	£312,500	10s.	7/9-8/3

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on May 7th.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	640	645
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	4,225	4,300
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	163	165
Neft Co.	250	—	—
Nobel Bros.	5,000	9,250	9,350
,, ,, ...	250	—	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

SCOTCH COMPANIES.

Supplied by Messrs. MACLEAN AND HENDERSON, STIRLING.

Company.	Capital Paid Up.	Value of Share.	Latest Price
Broxburn Oil Co., Ltd., Ord. $8\frac{1}{2}$ pd	£199,750	£10	$18\frac{1}{8}$
Do. 6% Cum. Pref. ..	£100,000	£10	$12\frac{5}{8}$
Burmah Oil, Ord.	£1,100,000	£1	53s. 6d.
Do. Pref.	£250 000	£1	24s. 9d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	$8\frac{1}{4}$
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	$19\frac{3}{4}$
Do. New (£8 10s. pd.)	£131,750	£10	18
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	89s. 0d.
Do. 6% Cum. Pref.	£100,000	£10	$12\frac{15}{16}$
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	30s. 0d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	66s. 6d.
Do. "B" Deb...	£150,000	£100	$152\frac{1}{4}$

DUTCH COMPANIES.

Company.	Quotations May 6th.	Quotations May 1st.	Florins.
Arnhemsche Petroleum Mij. ..	77	80	1,000
Aurora ,, ,, (Deb. 5%)	$90\frac{3}{4}$	$90\frac{3}{4}$	—
Campina Poiana Mij...	35	35	—
Dordtsche Petroleum Mij. (Pref.) ..	126	122	500
,, ,, ,, (Deb. $4\frac{1}{2}$%)	$102\frac{3}{4}$	$102\frac{3}{4}$	1,000
Elzasser Petroleum Mij.	$2\frac{7}{16}$	$2\frac{1}{4}$	1,000
Gaboes ,, ,, ...	$19\frac{3}{4}$	$19\frac{3}{4}$	—
Holl. Rumeensche Petroleum Mij...	$32\frac{1}{2}$–$33\frac{1}{2}$	26-$28\frac{1}{2}$	1,000
Int. Rum. Pet. Mij.	$88\frac{3}{8}$	$88\frac{3}{4}$	500
Java Petroleum Mij. (Ord.) ..	30	30	1,000
,, ,, ,, (Pref.) ..	42	$42\frac{3}{4}$	—
Koninklyke Nederl. Pet. Mij. Shares	$479\frac{1}{2}$–$481\frac{1}{2}$	480–487	250-1,000
,, ,, Share certificates	480	478–482	1,000
Mœara Enim Petroleum Mij. ..	115	$114\frac{1}{2}$–115	100
,, ,, 1-1,000 Oblig. 5	102	102	250-1,000
"Moesi Ilir" Petroleum Mij. ..	$34\frac{5}{8}$	$34\frac{7}{8}$	—
Nederl.-Rumeensche Petroleum Mij.	17	$17\frac{1}{2}$	—
Nieuwe Ned. Petroleum Mij. And...	$55\frac{1}{4}$	$55\frac{1}{4}$	1,000
Oliebronnen in Hannover Mij. ..	173	170	—
,, ,, (Deb. 5 %)	$100\frac{1}{2}$	$100\frac{1}{2}$	—
Panolan Maatschappij Cert. ..	340	340	—
Perlak Petrol. Mij. (6 % cum. pr. A.) ..	$123\frac{3}{4}$	$143\frac{7}{8}$	1,000
,, ,, (Common) ..	$99\frac{1}{4}$	97 x.d.	—
Sumatra-Palembang Petroleum Mij	62	61	500
Zuid Perlak Petrol. Mij. (Pref.) ..	$88\frac{1}{4}$	$84\frac{1}{2}$	—

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 10th May, 1906, as follows:—

On the date of our last report, April 26th, the price of tin was £182 per ton, since then it has advanced by leaps and bounds, and the market closes to-day at £198 15s. spot. In the above report we indicated that matters had reached a climax in the tin plate trade, and that the stoppage of a further large number of mills was impending, owing to the impossibility of obtaining orders for tinplates at prices to cover the daily increasing cost. On the 3rd inst., about 70 mills (in addition to the large number already inoperative) were closed down, and will only be restarted on day-to-day contracts with the operatives to execute such orders as may be obtainable at remunerative prices. In these circumstances it will be gathered that a large curtailment in the production of tin plates is taking place, the average output per mill being about 700 boxes weekly. As a matter of fact, we believe, about one-third of the total number of mills in South Wales were idle last week. This, in conjunction with the continued upward movement in the price of tin and large clearances of stock tin plates, has caused prices to advance, and makers quote for oil sizes to-day—according to position:—

IC	$18\frac{3}{4} \times 14$	124 sheets	110 lbs.	13/9 to 14/-	per box.
IC	$19\frac{1}{4} \times 14$	120 ,,	110 ,,	13/9 to 14/-	,,
IC	20×10	225 ,,	156 ,,	19/3 to 19/6	,,

F.o.b. Wales. Tin lining and iron hooping extra.

SHIPBUILDING.

There was launched on Tuesday, from the Wallsend Shipbuilding Yard of Swan, Hunter and Wigham Richardson, Ltd., a steel triple screw turbine steamer, which has been built to the order of the Great Central Railway Co., and which is intended for their express passenger service between Grimsby and Rotterdam and Hamburg.

Accommodation will be provided for a large number of passengers, including 70 first class, 24 second class and about 300 third class, the first class being arranged for in and on the bridge; the second class aft in the poop, and the third class in the between decks below the second class.

The machinery is being constructed by the Wallsend Slipway and Engineering Co., Ltd., and consists of Parsons marine steam turbines working on three shafts, steam being supplied by four large single-ended boilers working under Howden's system of forced draught.

On leaving the ways the vessel was named the "Immingham," by Mrs. Sam Fay, wife of the general manager of the company.

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Saturday, May 12th, 1906.

BATOUM AND BAKU CONSULAR REPORTS.

A TINGE of regret cannot but be left upon one's mind after reading the annual report of the British Consul upon the trade and commerce of Batoum during the past year, which we publish elsewhere in this issue. The eventful year of 1905 will live long to be remembered by the several crises through which the Caucasian trade passed, and which all assisted to completely disorganise the petroleum industry, yet none have yielded such disastrous results as those which tended during the year to bring about the downfal of the trade of the port of Batoum.

For the past quarter of a century, Batoum has increased in its importance as a shipping centre, and more particularly perhaps as a centre for the export of Russian oil in bulk and cases, but last year the volume of shipping dwindled down to a figure the like of which has not been known since the Caucasian petroleum industry became a factor in the world's commerce. Readers of the Review will have been long familiar with the various causes which collectively led up to the stagnation of Batoum's trade, yet it may be that the most serious aspect of the question has thus far been to some extent ignored. From time to time, every branch of trade is liable to more or less severe crises which bring about a state of disaster in a country's economic conditions, yet it is indeed fortunately seldom that turbulent elements bring in their train the almost complete destruction of an important branch of trade.

This, at all events, has been the case in regard to Batoum, where consequent upon the wiping out of the case oil trade, the outlook for the future is not at all re-assuring. An industry like that of the manufacturing cases for oil, is not one which can for long be allowed to stand still. True it is, that labour troubles may disorganise it for a time, but the demand is bound sooner or later to be met, and thus we see that owing to the relations between the manufacturers and employés at the case oil factories at Batoum being of a strained character, and there being a doubt on the part of the former as to whether it is possible to arrive at any satisfactory agreement with the workers, a number of the large factories have not only closed their doors, but decided to remove the installations to other places. Alexandria as well as some of the Adriatic ports has claimed attention in this direction, and now it is safe to say that a great portion of the trade in the manufacturing of oil cases at Batoum is being transferred for all time to other spheres. The effect of this move, which, it should be added, the case oil manufacturers have been forced to adopt, cannot be over-estimated in its importance as affecting the commercial importance of Batoum itself, and the opinions of the Consul upon the matter sum up the gravity of the situation very clearly. He says:—

> Such measures may have far reaching consequences for the only industry of any importance at the port of Batoum, and it is quite possible that the once prosperous industry which, during its better days, furnished permanent employment, at a low estimate, for 6,000 factory hands and a very large number of dock labourers, may never be rehabilitated at Batoum in its former prosperous and extensive proportion.

It may be, we indeed hope it will, that though a portion of the case oil trade has now left Batoum, this industry, which has furnished regular employment for so many thousands of the inhabitants, may not be totally hurled from Batoum's branches of commerce, and the pity of it all is that the workers have not adopted more conciliatory measures toward their employés until it is almost too late.

So far as the bulk export trade of Batoum is concerned, there is every reason to hope that the present year will see a return to normal conditions, and in fact, everything points to this to-day, for with the restitution of order in the oil fields, and the various companies now enjoying a steady period of work, the production is gradually returning to its old level.

Altogether, the report of Consul Stevens is one of deep interest to all who have the welfare of the industry at heart, and will amply repay perusal.

The annual report of the British Consul at Baku, which has been issued simultaneously with that of the Consul at Batoum, is, we fear, of a less interesting nature, for apart from embodying details with which our readers have long ago been familiar, there is little worthy of mention. The concluding portion, however, comes as a crumb of comfort to those English operating companies whose shareholders patiently await some slight return for their investments. These unlucky individuals have been told by their repective chairmen over and over again of the seriousness of the calamities which befel the Russian petroleum industry last year, and it certainly has appeared to us that the recent occurrences in the Caucasus came in the nick of time to cover a multitude of shortcomings. Mr. Urquhart now makes a clean breast of the matter, and points out that the recent crisis in the Russian industry will be by no means detrimental to them. Exactly so: that is what we have contended all along, but whether under the present system of management this will be so is quite another matter. Acts of bravery of which we have heard so much during the past year (which are discredited and ridiculed in the Baku press) are all very well in their way, yet they go but a little to bring dividends to operating companies whose interests lie in the production and profitable marketing of as large quantities of oil as possible, and not in the glorification of any individual.

LONDON OIL SHARE MARKET.

Friday, May 11th.

During the earlier part of the past fortnight, business on the London Stock Exchange was in a completely demoralised condition, the apprehensions as to the extent of the San Francisco disaster affecting all departments, although it was of course in the American section that the panicy feelings prevailed. The political outlook for our own market is not all that can be desired, the Egyptian Frontier question and the Natal difficulties having adversely affected both Consols and other gilt-edged securities. Still as decisive steps have been taken, these clouds on the horizon should shortly disappear, and the fact that the directors of the Bank of England have left the Bank Rate at 4 per cent. is a decidedly favourable factor.

The Oil Share group has scarcely participated in the excitement at all, very few changes having taken place. For the convenience of our readers we give Saturday, April 28th's quotations in full:—Anglo-Russian Oil $\frac{1}{16}$-$\frac{1}{8}$, Assam Oil $\frac{5}{8}$-$\frac{7}{8}$, Baku Ordinary 4s. to 4s. 6d., Preference 8s. to 8s. 6d., Bibi-Eybats $\frac{7}{16}$-$\frac{9}{16}$, Debentures 88-93, European Petroleum $\frac{1}{8}$-$\frac{1}{4}$, Debentures 88-93, Californian Oilfields $5\frac{1}{4}$-$5\frac{3}{4}$, Refineries $\frac{3}{8}$-$\frac{1}{2}$, Russian Ordinary 12s. to 13s., Preference 11s. to 12s., Debentures 87-90, Schibaieff Ordinary 9s. 6d. to 10s. 6d., Preference $3\frac{5}{8}$-$3\frac{7}{8}$, Shell Transport Ordinary 25s. 3d. to 25s. 9d., Preference $9\frac{1}{4}$-$9\frac{3}{4}$, and Spies $\frac{3}{8}$-$\frac{7}{16}$.

On Monday, the only alteration was a fall of $\frac{1}{4}$ in Californian Oilfields at 5-$5\frac{1}{2}$, while Tuesday was a Stock Exchange holiday, and on Wednesday changes consisted in the marking down of Bibi-Eybat Debentures to 86-91, and European Debentures to 85-90, consequent on the payment of the dividends. On Friday a better tone prevailed, and on balance Californian Oilfields regained the $\frac{1}{4}$ they had previously lost, whilst Russian Preference advanced 1s. to 12s. to 13s., and on Saturday the improvement continued, Californian Oilfields gaining another quarter at $5\frac{1}{2}$-6, while Russian Debentures rose 1 at 88-91. Monday's dealings saw a re-action in Californian oil fields to $5\frac{1}{4}$-$5\frac{3}{4}$, while on Tuesday Californian Refineries fell to $\frac{1}{8}$-$\frac{3}{8}$. Wednesday's transactions put Russian Debentures up another 1 at 89-92, but Schibaieff Ordinary were weak, and closed 1s. lower at 8s. 6d. to 9s. 6d. Some little business was transacted in Californian oil fields on Thursday, which carried the price up to $5\frac{1}{2}$-6, but all other prices were neglected. To-day's latest prices are given in full on page 328. The Mid-May settlement is scarcely concluded as we write, to-day being "pay day," but it is hoped no complications will arise.

ROUMANIAN PRODUCTION IN FEBRUARY.

The production of crude oil in Roumania in February, compared to January, was as follows:—

	January. Tons.	February. Tons.
Prahova District—		
Bustenari	38,056	35,462
Campina-Poiana	7,031	6,042
Moreni	5,061	6,125
Baicoi-Tinta	925	3,832
Other Fields	818	589
Total for Prahova ..	51,891	52,041
Dambovitza District	1,517	1,604
Buzau District..	1,000	867
Bacau	789	776
Total	55,197	55,288

In the above figures we note the substantial production obtained at Baicoi by the spouter of the Steaua Romana, which has more than compensated the reduction in output due to the shortness of the month.

The actual total output of crude oil, if we allow for the firms who have not made their returns for either January or February, is about 58,000 tons for each month.

The production of the leading firms in January and February were as under:—

	January. Tons.	February. Tons.
Steaua Romana—		
Bustenari	9,915	8,068
Campina	5,770	4,674
Baicoi	111	3,137
Other Fields	1,362	1,202
Total for Steaua Romana	17,158	17,081
Bustenari Co.	10,045	10,008
Telega Oil Co.	5,299	6,071
International Co.—		
Bustenari	2,464	2,675
Gura-Ocnitz	1,055	753
Total for International Co.	3,519	3,428
Trajan Co. (Hagienof & Campeanu)		
Bustenari	918	973
Campina	715	921
Total for Trajan Co. ..	1,633	1,894
Campina-Moreni Co.	4,130	3,606
Moreni Co.	—	2,650
Romano-American Co.	1,966	116
Arnheemsche Petroleum Co. ..	1,121	988
Grigorescu and Vladescu	993	777
Seceleanu Bros.	759	551
Stanescu and Guiglescu	691	746
Aquila Franco-Romana	622	945
Colombia Co.	869	837

ROUMANIAN PETROLEUM EXPORTS IN MARCH, 1906.

The exports of petroleum products from Roumania in March, 1906, amounted to the record figure of 33,033 tons against 14,369 tons in February, and 13,850 tons in January.

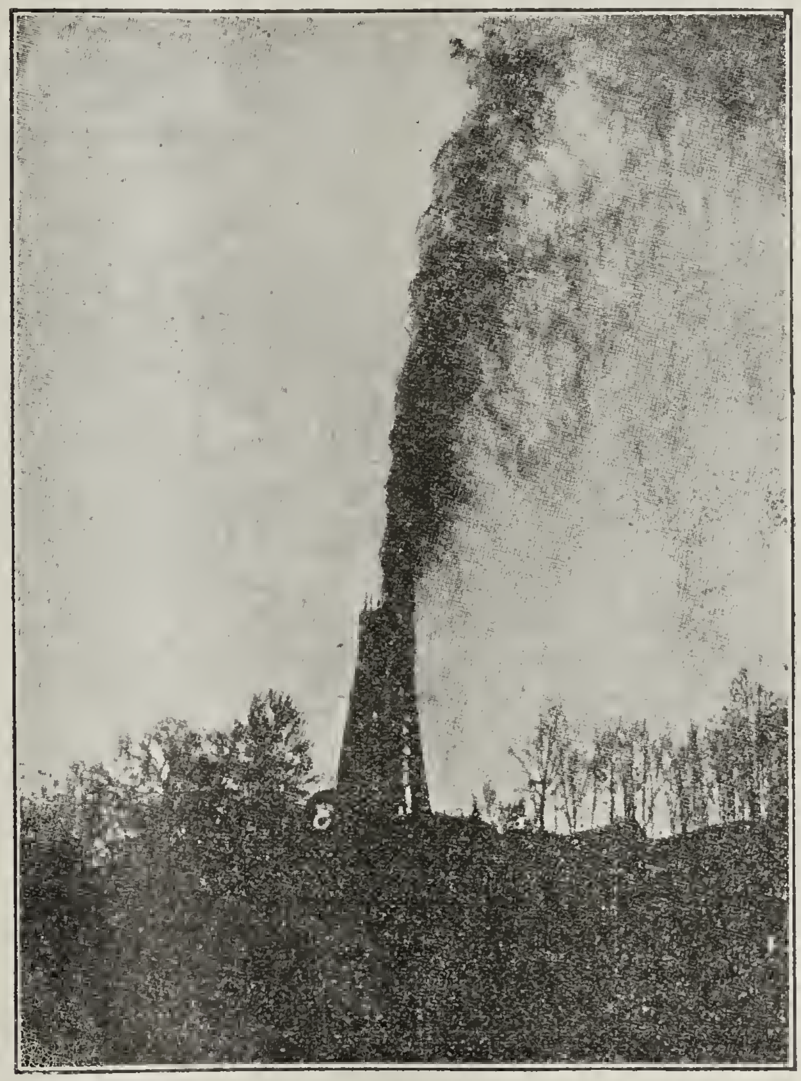
The exports of different products were:—Crude distillate, gas oil, etc., 5,378 tons; illuminating oil, 18,403 tons; and benzine, 8,881 tons.

The largest quantities of oil went to the following countries:—England, 11,501 tons; France, 11,463 tons; Germany, 4,535 tons; Italy, 2,008 tons; and Turkey, 2,185 tons.

THE SPOUTER AT CAMPINA-PITZGAIA.

There is to hand information concerning well No. 8 of the Campina-Moreni Co., the powerful spouting of which has attracted general attention. It is situated on the left side of the Campina anticlinal, near the summit of the same. On the right bank of the Prahova river, in the direction of the Vrajitora tract, belonging to the Hospital Trust of Bucarest, and leased to the Campina-Moreni Co., the sand anticlinal narrows down and shews signs of having suffered a series of latteral pressures caused by the rising and subsistence of the ground subsequent to the great upheaval, which has produced the configurations characteristic of the tertiary formations of the Carpathian regions of Roumania.

The strata, which are identical with those encountered in the borings of the Steaua Romana on the opposite side of the river, gradually rise until they become almost vertical, which explains the great depth at which the oil is found on the property of the Campina-Moreni Co. Apart from this phenomenon, there are a series of secondary transversal fractures in the direction of the Prahova, which have brought about more or less considerable depressions towards the south-west. Generally towards the south the slope becomes more gentle, and in wells laid down on the southern section it is hoped to strike oil at a maximum depth of 500 metres.



The highly satisfactory results obtained by Prince G. Gr. Cantacuzene, the present Roumanian Prime Minister, at Gura-Draganeasa (Provitza de Jos) have an important bearing also on the whole of this district. There in a hand well 160 metres deep, sunk, like all the other wells in that locality on the northern side of the anticlinal, an oil stratum was met, which yields a minimum of 10 tons per day. At that spot the strata are very steep, becoming almost vertical, and it is necessary to carefully watch the work which is being carried out there in order to be able to draw from the observations made more precise conclusions on the extent and importance of the zone of broken formations of which Campina is the centre.

At Moreni, the Campina-Moreni Co. continue to get excellent results. The production varies from 250 and 310 tons daily and is supplied by five producing boreholes. A further increase in the production is momentarily expected.

AMERICAN NOTES

The Panama Pipe Line.—Reports from Panama state that the Union Oil Co. is now distributing its pipe line across the Isthmus of Panama, while steel storage tanks are being erected at both ends of the pipe.

Success at Powell.—It is reported that the Powell district has developed a very good producer, a well having been brought in which is good for nearly 400 barrels per day. It will be recollected that the Powell district is situated in north Texas, lying east of Corsicana.

A Decent Dividend.—The Crowley Oil and Mineral Co., which is operating in the Jennings field paid on April a dividend of ten per cent., which is the tenth ten per cent. dividend delared on the capital stock. Of the total amount, 40 per cent. was declared in 1905.

The Movement of Jennings Oil.—As recorded elsewhere in this column the production of Jennings has increased considerably during the past few weeks, and the total March movement was the heaviest yet recorded. In round figures it amounted to 1,000,000 barrels.

At Spindle Top.—The latest information from Spindle Top shews that all is activity in that famous producing region. During the first half of April no less than seven wells were completed, five of which rank as producers. The production of Spindle Top is now estimated at 3,500 barrels daily.

New Jennings Company.—A new company has been recently formed to operate in the Jennings district under the name of the West Side Oil Co., Ltd. The property the concern has acquired includes the holdings of the Superior Oil Co. Its capitalisation is $10,000, and the objects are to bore for oil and gas, etc.

King Crowther Again.—A company has recently been organised at Maine, with a capital of $3,000,000, to take over the holdings of the King Crowther Corporation of Texas. We learn that some "thousands of acres of rich oil land are held under lease, while additional oil lands are owned on fee simple."

Decease.—The death is announced of Mr. W. T. Campbell, a member of the original Hogg-Swayne Syndicate. Mr. Campbell was born in England in 1856, but went to America at the age of 16, landing at Galveston. He took a prominent part in the formation of the above-mentioned syndicate when the oil excitement existed in Beaumont.

The Heywood Oil Company.—The annual meeting of the stockholders of the Heywood Oil Co. was held recently in Beaumont, when the report of the past year's operations, which has already appeared in the Petroleum Review, was agreed to. It may be mentioned that at the end of March this year, the company had on hand either in earthen or steel tankage, nearly one million barrels of oil.

Extending the Use of Liquid Fuel.—The shortage of coal in Kansas City and contiguous territory, says the *Oil Investors' Journal*, has given an impetus to the use of liquid fuel. It is now reported that several large industries in that section are contemplating the installation of oil-burning apparatus. With one exception, all the large packing companies in Kansas City use oil fuel in preference to coal.

News from Hoskins.—According to the latest issue of the *Oil Investors' Journal*, the reports from Brazoria county contain but very scanty information as to the drilling operations at Hoskins Mound. It is, however, known that an oil of the heavy variety is being obtained from No. 2 well. A pipe line proposal is on foot to lay a six-inch pipe to a spot on the railway six miles distant. There are now five derricks in the field.

Drains on Stocks.—Continued drains on the oil stocks of the Indiana and Ohio fields are shewn by the latest report of the Buckeye Pipe Line Co., the runs for March being 158,939 barrels in excess of those of February, yet there was a net decline in the stocks of 300,925 barrels. The gross stocks in the eastern fields declined 535,000 barrels, leaving them at the lowest notch in recent history, with little or no prospect of an improvement. As a consequence the general tenour of the market is upward.

AMERICAN PETROLEUM EXPORTS.

STATISTICS FOR MARCH.

According to the official publication of the Washington Bureau of Statistics, the exports of petroleum from America from the various ports during March were as under:—

	1905. Quantities. Gallons.		1906. Quantities. Gallons.
CRUDE—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	5,129,547		9,107,927
New York	315		1,351
Philadelphia	1,234,244		—
Galveston	721,319		1,806,978
Total	7,085,425	Total	10,916,256
Total value for the month, 1905			$390,507
,, ,, ,, 1906			$611,256
NAPHTHAS—			
Baltimore	600		—
Boston and Charlestown	—		—
Delaware	72,691		—
New York	1,635,836		2,825,379
Philadelphia	651,349		2,036,608
Galveston	—		—
Total	2,360,476	Total	4,861,987
Total value for the month, 1905			$200,343
,, ,, ,, 1905			$344,156
ILLUMINATING—			
Baltimore	2,038,963		—
Boston and Charlestown	97,254		9,793
Delaware	2,607		—
New York	44,607,224		46,031,880
Philadelphia	32,116,780		26,198,264
Galveston	2,492,504		3,956,455
Total	81,355,332	Total	76,196,392
Total value for the month, 1905			$5,037,818
,, ,, ,, 1906			$5,517,350
LUBRICATING AND PARAFFIN—			
Baltimore	171,963		268,100
Boston and Charlestown	8,803		4,449
Delaware	—		—
New York	7,192,115		9,493,682
Philadelphia	4,169,491		4,476,296
Galveston	—		9,380
Total	11,542,374	Total	14,251,907
Total value for the month, 1905			$1,306,963
,, ,, ,, 1906			$1,678,175
RESIDUUM—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	—		—
New York	420,000		3,755,500
Philadelphia	3,578,862		4,388,995
Galveston	—		—
Total	3,998,862	Total	8,144,495
Total value for the month, 1905			$86,388
,, ,, ,, 1906			$146,254
TOTAL MINERAL OILS—			
Baltimore	2,211,528		268,100
Boston and Charlestown	106,057		14,242
Delaware	5,204,845		9,107,792
New York	53,855,490		62,107,792
Philadelphia	41,750,726		37,100,163
Galveston	3,213,823		5,772,813
Total	106,342,469	Total	114,371,037
Total value for the month, 1905			$7,528,195
,, ,, ,, 1906			$7,917,995

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The Louisiana Company.—The Louisiana Co. has been chartered by the State of Louisiana with a capital of $1,000,000. The new company will take over the six-inch pipe line constructed from Jennings to Lake Charles by the Texas company, and also the eight-inch line from Jennings field to the railroad near the Mermentau river, and also the tankage used in connection therewith. All the officials of the concern are associated with the Texas company.

THE USE OF LIQUID FUEL IN CALIFORNIA.

Few American States there are in which liquid fuel has made such progress during recent years as in California, whose general adoption of oil for power purposes over coal will equal, if not excel, anything that had been done in other countries.

The most recent issue of the *Oil Investors' Journal* contains reference to the various industries in which liquid fuel now plays an important part in the State, and from this article in our contemporary it appears that over 3,000,000 barrels of crude oil were used in gas manufacturing in San Francisco, Oakland, Los Angeles and other smaller cities in the State during 1905. A superior quality of gas is made with crude oil, and aside from the low cost of the oil, this fact is largely responsible for the growth in that particular branch of the industry. It is said that oil can be put into the holder for less than 20 cents per 1,000 feet. It is believed that by the end of the present year practically all of the gas companies in California will use oil instead of coal for gas making purposes.

The adoption of petroleum fuel in the smelters at many of the large mines in Arizona, New Mexico and Nevada serves to call attention to a remarkable growth in the interstate traffic of California crude or fuel oil. Washington and Oregon have become large consumers of the product and the installation of oil burning apparatus is rapidly supplanting coal in the varied industries of that region. The fuel supply formerly came from British Columbia, but the competition of California oil has practically driven the coal of that region from the market.

California fuel oil has not stopped in Washington, but has pushed its way up into British Columbia into the very heart of the colliery territory, and is being used in some instances within 50 and 100 miles of large coal mines. Victoria is the distributing point for the largest part of the British Columbia trade. On December 26th, 1905, the Union Oil Company's tanker "Whittier" cleared San Francisco with 10,000 barrels of crude for British Columbia, and has made several trips since.

Although Alaska has immense coal deposits, fuel oil has attained a foothold in that country, getting the supply from California. Steamers on the Yukon river between Dawson and St. Michaels are using liquid fuel under their boilers, and even with the long haul from San Francisco, it is proving more economical than coal.

Sugar refineries in the Hawaiian islands are large consumers of California crude at the present time, with the prospect of an enlarged consumption in 1906, owing to the advantages over coal from an economical standpoint. On January 5, the steamer "Rosecrans" sailed from Monterey for Honolulu with a cargo of 23,000 barrels of crude oil and 2,750 gallons of distillate. On the same date the steamer "Marion Chilcot" cleared from the same port for Honolulu with a cargo of 16,000 barrels of crude oil.

South American republics have also been opened up as a market for California crude and several large cargoes have been shipped to Calita Buena, Chili, for use on railroads. Liquid fuel commends itself especially to tropical climates, where it is difficult to procure stokers. There is considerable risk involved, however, in contract, for the delivery of crude to British Columbia and South American countries, owing to the liability of the impositions of arbitrary duties at any time.

On the first of the year, nineteen vessels were engaged in the oil carrying trade on the Pacific coast, with a gross capacity of approximately 480,990 barrels, or an equivalent coal capacity of 137,426 tons. A number of vessels have recently been added to the above fleet, largely augmenting the gross capacity.

The United Railroads Co. of San Francisco is a heavy consumer of fuel oil. It is said the annual consumption is about one million barrels. A 7,000 h. p. engine, which generates power for the greater part of the company's electric system, consumes about 380 barrels a day, or 138,700 barrels a year. This amount represents only a a small part of the gross consumption, as the company operates several other plants for its cable systems.

The Hawaiian Islands and Alaska have profited by the existence of large quantities of crude oil in California. In the case of Hawaii, prior to 1902, it was necessary to transport coal for fuel from Australia and British Columbia, 5,000 miles in the former and 2,000 miles in the latter. The United States Government maintains a coaling station in Hawaii, getting coal from San Francisco, at a cost of from $9 to $10 a ton. The coal supplies of sugar plantations and other manufacturers probably cost $2 or $3 more. Even at these prices the coal imported was of poor quality.

SOMETHING SMART, IF EXAGGERATED.

Some short time ago a wildcat well was drilled at Rangeley, Rio Blanco county, Colorado, by a gentleman in search of oil. It was fairly successful, which fact has caused the following "expert" opinion to be circulated as to the probabilities of the territory:—

The Rangely field consists of the crest of an anticlinal dome, remarkable alike for its enormous size and the perfection of its holdings. Beaumont, Texas, and Baku, Russia, are the only other anticlinal domes that have been drilled upon. The dome at Baku is larger than at Beaumont, and the Rangely dome is fifty times larger than that at Baku. The Beaumont and Baku domes, however, contain only asphalt oil.

The geologists who have experted the Rangely field say that the oil in the dome there is subjected to a pressure of over 1,000 pounds to the square inch, which is something unheard of before in the history of the oil world. They estimate there are 500 square miles in the field and that each square mile has an oil-bearing capacity 50 per cent. greater than the total output of oil for the United States during 1903, which was the banner year of the United States.

Carrying out these figures to their logical conclusion would indicate there are 75,000,000,000 barrels of oil stored up in the oil reservoir (the Dakota sandstones) at Rangely. This oil is worth not less than $1·50 a barrel, but even at $1 a barrel it would represent the value of the product for the entire field at $75,000,000,000.

If oil is annually marketed from this field equaling in value the entire gold product of Colorado, which is about $30,000,000 a year, according to the above figures, it would take 2,500 years to exhaust the oil resources at Rangely. The estimated value of the oil product of Rangely is 650 times the assessed value of Denver, and about 214 times the assessed value of the entire State of Colorado at the present time.

MISCELLANEA.

PRODUCTION OF CRUDE OIL IN GALICIA IN MARCH.

The following are the official figures of the production of crude oil in Galicia :—

	Production in March. Tons.	Stocks on 31st Mar. Tons.
West Galicia—		
Potoc	1,703	6,663
Rogi	2,153	12,390
Rowne	81	274
Tarnawa-Wielopole-Zagorz	2,305	6,938
Krosno	3,119	15,706
Other Fields in West Galicia ..	2,267	10,104
East Galicia—		
Boryslaw-Tustanowice	46,042	403,752
Schodnica	4,294	30,714
Urycz	1,247	17,126
Mraznica	130	1,715
Other Fields in East Galicia ..	1,040	220
Total	64 741	505,672

The deliveries of crude oil from the oil fields during March amounted to 65,793 tons, of which 45,333 tons came from the Boryslaw-Tustanowice fields; the total quantity of oil lost or burnt as fuel at the wells in March was 2,604 tons, of which at Borylaw-Tustanowice 1,800 tons. The stocks of crude oil at the oil fields have during March, declined by 3,656 tons.

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THE BROXBURN OIL COMPANY, LIMITED.

The report by the directors of the above company which is to be submitted to the twenty-ninth annual general Meeting, to be held next Wednesday, shews that after paying all current charges, the balance at the credit of profit and loss account (including £3,121 12s. 6d. brought forward from the previous year) is £76,170 11s. 7d., and the directors recommend that this sum be disposed of as follows :—

	£	s.	d.
(1) In writing off the usual depreciation of five per cent. on the net balance of capital expenditure as at 29th March, 1905 ..	12,676	11	0
(2) In payment of a dividend at the rate of six per cent. on the preference shares of the company	6,000	0	0
(3) In payment of a dividend at the rate of fifteen per cent. on the ordinary shares of the company, free of income tax	29,962	10	0
(4) In payment of income tax on dividend on the ordinary shares	1,498	2	6
(5) To credit of retort renewal account	23,000	0	0
(6) In carrying forward a balance of	3,033	8	1
	£76,170	11	7

The retort renewal work at Roman Camp works was satisfactorily completed early in the financial year, and the new retorts at that works and also at Broxburn works, continue to give great satisfaction.

In the refinery department the outlay on renewal work and for additional plant has been unusually heavy. That work, however, is now almost completed, and the directors are satisfied that it will result in increased efficiency and reduced costs.

The company's existing mineral and other leases at Broxburn would naturally expire in 1916. In view, however, of the early opening up of the Dunnet seam of shale, which has recently been proved to underlie a large portion of the Broxburn mineral field, the directors are pleased to state that an arrangement has been concluded with the Earl of Buchan by which the existing mineral and other leases have been extended for thirty years, and will therefore now endure till Martinmas, 1946. The stocks in hand and in process of manufacture have, as usual, been taken into the balance sheet at low rates.

Almost without exception prices of products were considerably lower than in the previous year. The satisfactory result of the twelve months' working is therefore to be attributed to economies affected by the renewal work carried out during the past few years.

As no material reduction in prices are anticipated, the outlook for the coming year is fairly satisfactory.

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LATE DEVELOPMENTS AT CAMPINA.

Well No. 64 of the Steaua Romana, on tne Bucea plot, on the 26th April, produced a violent eruption, and in a few hours threw out about 1,500 tons of oil.

This well, which was laid down in April, 1903, first struck oil at 243 metres, from which depth about 1,730 tons were extracted; sunk deeper, the well struck two other prolific strata at 255 and 265 metres, from which 8,550 tons of oil were obtained. Subsequently the well was further deepened, and at 286 metres the recent great eruption took place. The well is situated on the southern side of the meotic anticlinal of Campina, at a distance of 200 metres from the axis of the anticlinal. It is on the same line as the prolific wells Nos. 62 and 69 on the Bucea plot, and No. 63 on the Gahitza plot, which struck oil recently. All these four wells have found oil at the same depth, between 260 and 270 metres, and it is interesting to note that they cover a distance of 1,150 metres on the southern side of the anticlinal. This fact is of great importance, as it proves the existence in the strata running through the Campina plateau of deposits of an extent and richness which are not often seen in Roumania. Work on well No. 75 of the Steaua Romana, situated on the left bank of the Doftana, has been stopped. The well has now reached a depth of 513 metres, and is now in the salt deposit without any hope of ever striking oil. Well No. 61 on the Bucea property, which has not had any production yet, has struck oil at 488 metres. This well is situated in the micene gypsum formations. An eruption is expected.

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Batoum Petroleum Shipments.—The shipments of petroleum products from Batoum for the week ended April 15th (o.s.), were as follows :—

	Illuminating oil.		Other products.	
	1905.	1906.	1905.	1906.
To Europe	637,000	216,000	382,000	431,000
To the East	573,000	61,000	3,000	—
To Russian Ports	—	125,000	—	5,000
From Jan. 1st to April 15th :—				
To Europe ..	6,217,000	3,300,000	1,933,000	1,697,000
To the East ..	4,795,000	868,000	108,000	1,000
To Russian Ports	1,153,000	1,359,000	34,000	87,000

THE CEDROS OIL FIELDS OF TRINIDAD.

REPORT BY THE GOVERNMENT GEOLOGIST.

(Continued from page 308.)

Beyond La Lune the section becomes more regular, a small fault or faults bring up the carbonaceous horizon below tide mark, and the cliffs are formed of the hard underlying sandstones, dipping at from 80 degrees to vertical. The thin beds of calcareous sandstone so frequent towards the top of the argillaceous and carbonaceous horizon form distinct lines of reef out to sea, and often emerge on the shore at low tide. The strata down the lowest tertiary rocks observed on the anticline are still almost entirely sandstones, forming steep cliffs on the shore and steep difficult ground inland.

At about six miles west of Moruga the sandstone beds in inland sections begin to thin out rapidly, and are replaced by argillaceous sands and finally clays. Some indication of how this occurs is given by the lines of outcrop marked on the map, the lower sandstones disappearing first, till in a distance of about two miles, the series becomes almost entirely argillaceous. The coast section almost becomes of less importance owing to the number of landslips, so that it is difficult to ascertain the dip and strike of any bed with accuracy. This is especially the case in and about the carbonaceous horizon, which becomes finer and more clayey in the grey beds, though the thin calcareous beds near the top still continue and afford good evidence as to dip and strike. The solid yellow and lagoon sandstones at the base also continue.

Near the mouth of Mariquite river, a bed rich in fossils was observed. It is a bed of grey calcareous sandstone from six to eight inches thick, lying above a bluish calcareous sandstone, and below softer rusty sandstones of lagoon type. The rock is fairly coarse in grain, and contains, besides small coal fragments, a great number of more or less broken gasteropods and lamellibranchs. It is evidently a beach or shore deposit, none of the shells being in the position of growth.

Mr. R. J. L. Guppy has kindly identified the following fossils from the bed which lies at some 4,000 to 4,100 feet above the lowest tertiaries exposed in the locality, and must consequently belong to a late horizon in the tertiary series.

Tellina	sp.
Arca	sp. cf. trinitaria.
Ancillaria	sp. cf. lamellata.

This fossil locality has been noted by Wall and Sawkins.

The coast section, as we approach Point Grande Rivière, is formed again of higher beds, the carbonaceous group with its underlying massive pale sandstone coming on again, and containing two distinct seams of good lignite, as well as minor carbonaceous beds. These are the coals discovered by Mr. C. S. Rogers (Forest Officer), and analysed by Professor Carmody: the thickest seam is about 3 feet 6 inches. They will be described at greater length in a later report.

West of Point Grande Rivière and on both sides of the Rio Negro, the same coals appear again, the accompanying sandstone beds becoming thinner, and being replaced by clays. A low-lying stretch follows, the strata being chiefly clays at a lower horizon than the carbonaceous group; slips have been frequent, and the section is very poor.

Where the carbonaceous group with its underlying sandstone emerges again to the westward, a further change is noticed; clays are still more conspicuous, especially in the banded grey beds; thin shaly sandstones of the type described as the Benitie group (see Mayaro-Guayaguayare Oil Field Report) replace much of the solid sandstone, though the pale yellow sand bed at the base and the thin calcareous sandstone beds near the top are still observed. At a horizon about the centre of the carbonaceous group and at a point three and three quarter miles west of Grande Rivière Point, a bed of grey shelly sandstone appears in the cliff. It is a soft sand, but contains some hard patches cemented by carbonate of lime, and a great number of lamellibranchs and gasteropods in a fairly good state of preservation, besides some selenite crystallised in radiate groups. Mr. Guppy has kindly identified the following genera and species from this bed.:—

Corbula victa	Pleurotoma haitense
Cardita scabricostata.	„ venustum.
Cardium haitense.	Natica canrena.
Persona similima.	

This fauna represents a horizon fairly high in the tertiary series. Though the fossil contents of this thin bed are entirely different from those of the Mariquite River fossil bed, the horizon of the two is practically the same, this one being, if anything, slightly higher in the series, at most 30 feet.

This fossil locality appears to have been overlooked by Wall and Sawkins, and on account of the comparative richness of the fauna, it may prove of great value in a correlation of the upper tertiaries of Trinidad. The bed lying above a bed of lagoon sandstone intercalated in the grey sand clays of the carbonaceous group, is evidently a shore deposit, none of the organisms appearing in position of growth.

From this point westward to Siparia Point, the argillaceous aspect of the carbonaceous group becomes increasingly evident, fine grey banded clays forming almost the entire group, though harder sandy clay beds with a peculiar cavernous weathering occur here and there, and the massive sandstone at the base still persists. A corresponding change takes place in the minerals of organic origin.

Lignitic beds disappear, and their place is taken by thin beds of purplish brown bituminous shale (intercalated in the clays), closely resembling the oil shales of central Scotland, but softer. These beds seldom exceed one foot in thickness, and are cut off and twisted about by landslips in the clays. Minute strings of lignite have been noticed once or twice in these beds, but the carbonaceous aspect has almost entirely given place o a bituminous aspect.

In the neighbourhood of Foutine River, the series inland is almost entirely clay, with some conglomeratic beds (large and well-rounded pebbles of cretaceous rocks in a sandy clay matrix). A mud-pool with discharge of gas and a little oil occurs east of Foutine River and a short distance inland, and a few small saline springs with a slight and intermittent evolution of gas have been observed along the same line of strike, while minute fragments of glance pitch may be found on the shore.

It is evident that with the development of the impervious clay beds, oil-forming conditions come into play.

One mile west of Fontine River, beyond where a small fault has brought up strata of a slightly lower horizon (presumably the horizon marked by the mud-pool and gas wells), the odour of petroleum becomes very distinct on the beach, and can be detected for a distance of a quarter of a mile. At one point, from a bed of grey sandstone underlying the clays, an exudation of oil is observed. It is of a yellow colour, differing from any observed on the surface in Trinidad up to the present, and though the rock is tide-washed twice a day the exudation continues slowly and steadily. It was impossible to collect a sample large enough for analysis, but a specimen of the oil rock was submitted to Prof. Carmody. It is a soft pale grey sandstone, fairly coarse in grain, dipping at 65° to 70° south. Prof. Carmody notes that the oil has a "peculiar sulphur odour."

This identification of a genuine oil rock *in situ* in a continuous section is a matter of great importance. The horizon, as nearly as can be calculated from rather insufficient data, is somewhere between 3,470 and 3,700 feet above the lowest tertiaries exposed on the crest of the anticline to the north.

The horizon (calculated approximately from observations) of the oil rock struck in No. 4 well in the Mayaro-Guayaguayare oil field was 3,600 feet above the oil rock (No. 1 streak), and the oil was struck in a "fine grey sand or sandy clay" (see Report on the Mayaro-Guayaguayare Oil Field, p. 11). In that report the occurrence in more than one locality of "stiff purplish brown clay with a bituminous aspect" was noted as occurring above the oil rock of No. 4 well, or, more correctly, above the line where the oil rock might be expected to crop out. Furthermore, thin very hard beds were pierced in No. 4 well at no great distance above the oil rock.

In well No. 6, which was drilled since the former oil report was written, further evidence was obtained. It was calculated that the horizon of the No. 4 oil streak would be struck somewhere between 900 and 1,200 feet, a very wide margin being left for error. The well passed through several hundred feet of yellow sandstones, and reached greyish sandy clays with some thin and very hard beds at about 900 feet; signs of oil appeared at 965 feet in a grey sandy clay, and work was temporarily abandoned owing to the loss of a "shoe" in the bottom of the well, at something less than 1,000 feet. The depths are only approximate, as no regular log was kept.

The evidence, however, is fairly complete; the thin hard beds are most probably the thin beds of calcareous sandstone which almost invariably appear towards the top of the group spoken of above as the carbonaceous group. In this locality, on the southern coast (Rio Blanco), these beds appear, forming reefs below tide-mark. The "fine grey sand or sandy clay" of wells No. 4 and No. 6 and the purplish brown clay or shale add confirmatory evidence, and it seems quite clear that in the southern coast section at Rio Blanco we have an outcrop of the "No. 4 streak," hereafter to be termed the "Rio Blanco oil sand." The inference that this petroliferous horizon may be of much greater importance than was formerly supposed to be justifiable.

Other important results follow from this correlation. The detailed mapping of the coast section enables us to correlate this oil rock approximately with the lignitic beds of Rio Negro and Grande Rivière and the carbonaceous horizon as traced even to eastward of Moruga as far as Canari Bay. Thus additional evidence of the horizon and thickness of strata between the lower and upper rock can be obtained in many localities. The lignite occurs in a sandstone environment, and the petroleum in a clay environment, or at least overlaid by thick impervious clays, and this evidence may make it possible to predict in what localities the horizon will be petroliferous, and in what localities carbonaceous. During the survey of the Eastern coal district a correlation was attempted between the Galeota section and the section from Manzillo Point northward, chiefly on lithological grounds, and by measurement of sections. From this it appeared that a group of lignite seams, associated with sandstones, occupied the horizon of the No. 4 oil streak, but this conclusion, though since confirmed to some extent by fossil evidence, was not published, on account of its being merely an approximate correlation.

The occurrence of this petroliferous horizon at Rio Blanco, at a distance of 32 miles from where it was first struck in No. 4 well, is significant of the wide distribution of oil-bearing rocks in Trinidad. If the evidence in the Rio Blanco district, extending for little over a mile, were an isolated phenomenon, it would not have been necessary to give so much attention to it, but, as will be seen later, further evidence has been obtained in the ground to the westward.

Siparia Point is formed of several massive beds of sandstone, underlying the petroliferous horizon. There is a well-marked curve in the strike in this neighbourhood, due to an outcrop of cretaceous strata which appears in the heart of the anticline at a distance of about a mile and a quarter inland. Fragments of glance pitch are washed up on the shore at Siparia Point; these are probably derived from the Rio Blanco oil sand.

West of Siparia Point, we begin to descend rapidly in the series, the strata being almost entirely soft clay with a few thin iron-stained sandstone beds. The section is very obscure in places, the clay being washed down into low banks, while small slips are very frequent.

Beyond Jayabal River, some beds of hard sandstone make their appearance; these probably represent the base of the upper Galeota sandstone.

At about a quarter of a mile east of Majawal River, another fossil bed is observed. It is a fairly coarse iron-stained grit, containing small iron-cemented nodules pebbles of cretaceous cherts and fragments of carbonised wood, with many fragments of lamellibranchs and gasteropods. Ostrea is the only genus recognisable, the other fossil contents being too fragmentary for identification. It is evident that this is a shore deposit, thus accounting for the comminuted state of the mollusca. The horizon is about 1,200 feet below that of the last fossil bed mentioned.

West of Majawal River we continue to descend in the series through a thick mass of stiff blue and grey clays, relieved by only one or two beds of yellow sandstone of lagoon type. Small oil shows become very frequent, the first noticeable being a discharge of gas and fine mud through the sand of the beach, forming a mud volcano in miniature, five inches in diameter. This lies between tide marks, and has a constant discharge of gas with little trace of oil. Small lenticular beds of dark brown sandstone saturated with oil occur here and there amidst the clay on the foreshore. These are not of any importance in themselves, but are interesting as giving evidence of the presence of oil-forming conditions over a wide belt of country; some of them may represent the source of oil struck in No. 3 well in the Mayaro-Guayaguayare oil field.

(To be continued.)

OUR . . . . . . AMERICAN LETTER . .

From Our . . Own . . . . Correspondent.

Pittsburg, *April 26th,* 1906.

Though information from the Mid-Continent and the Texas fields speaks of a general improvement in operations and the display of great energy on the part of operators, I am afraid that so far as the South-west districts are concerned the prospects for an early revival in development work are not very promising. The discovery of some new producing territory capable of supplying wells above the average in productiveness would change the conditions in a very short time. A large acreage has been leased outside of the old defined limits, but the work of testing that class of territory has not yet begun, and as to the result when tested nothing is known.

In Roane county there is quite a little new work starting. The gas companies are the most active in development work, but a few oil companies are taking a chance on finding a new pool. Two years ago some small wells were found in Roane county, but when the market declined operations were abandoned, and now that the outlook for better prices is encouraging development, work will in all probability be resumed.

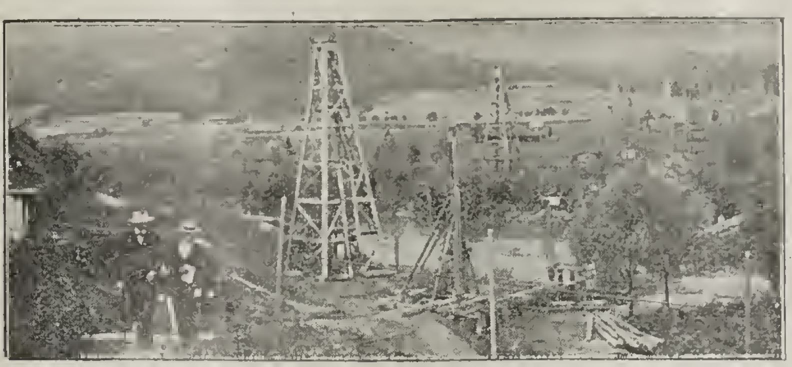
In the lower south-west and south-eastern Ohio fields the discovey of new pools is possible, but as for fields of any appreciable dimensions they are no longer expected. The vast areas of territory that have been tested preclude the possibility of finding large bodies of undeveloped territory.

The discovery of a pool of oil in the big lime formation, a few years ago, in Cabell county, has had much to do with giving rise to the opinion that at some point along the line between that development and the oil producing fields to the north-east pools of the same character may exist.

In this only partly contested territory large areas have been leased, and it is quite probable that should the market continue to advance that by the close of the year there will have been a very thorough testing all along the line which will settle for all time the status of the territory now in doubt.

In Putnam county it has been demonstrated that there are gas deposits, and for that reason operators are hopeful that a pool of oil may be found in that locality. Between that county and production to the north-east experiments will be the most conspicuous. Beginning with the termination of production at the north-east operators are starting considerable new work.

The Illinois field, of which the Review has already published a deal of information, is still the centre of activity in Crawford county, and since I last wrote you, some good producers have been drilled in. In Prairie township, section 2, the Benedum-Trees Oil Co. has drilled in a second test on the Cox farm, and has another good producer. This well is located three miles south-east of Annapolis and in territory that had not been previously tested except by the first well completed on this farm.



The well on the John A. York farm, started two miles east of Oblong, has been drilled into the sand, and the hole filled in a short time; just how much the well will produce is yet to be determined. Some of those who have visited it think it will be good for 100 barrels a day. Should the well prove as good as some predict, it will add two miles of producing territory to the field. Leases in the vicinity of the new strike have been in great demand. At Marietta, O., parties are said to have leased a 100-acre farm south of the York farm, for which they paid a bonus of $30 an acre, and are to give a sixth royalty. To the east of the York farm it is reported that a farm was leased at $50 an acre and a sixth royalty.

In the lower Kentucky districts I hear that some important developments have taken place during the past few days. A number of unusually large strikes have appeared, and on the whole drilling seems to be largely on the increase. Many of the divisions that have commanded little attention for several months, are taking a new lease of life and weekly results are no longer confined to the larger sections of development.

A few days ago two strikes were made in Wayne county, with an aggregate daily output of 400 barrels. In the old Stubensville district the Kentucky Colonels' Oil Co. completed its forty-fifth effort and it started out making 200 barrels daily. The older Stubensville district has commanded little attention until recently, the newer divisions of Wayne county detracting the interest. The renewal of drilling with such excellent results at the outset will greatly stimulate interest in that section The second of the gushing class also made 200 barrels. Three other strikes have been made in Wayne county within the past few days, with an aggregate production of 45 barrels.

Of the smaller fields of Kentucky lately contributing strikes, Whitley county, in lower Kentucky, and Floyd county, in eastern Kentucky, lead in interest. A new territory has been developed in Western Whitley, and the nucleus of a development created which may in time form the connecting oil field between the Wayne and Whitley main divisions. Two strikes of fair capacity have lately been made, while in Floyd county the drill is being gradually extended into outlying districts.

With regard to the Mid-Continental fields when a partial suspension of field work became necessary by reason of surplus production, activity found a vent in testing leases ahead of production. Prospect work has been greatest in the Cherokee division, and has been the means of increasing the output because so many of the tests resulted in good wells, which in turn made offset wells necessary.

THE OIL TRADE OF BAKU IN 1905.

CONSULAR REPORT.

The annual report of the British Consul at Baku makes lengthy reference to the oil trade, which is the staple industry of the town.

The total amount of British capital in the oil industry here amounts to about £6,000,000, the five principal British companies being:—The Russian Petroleum and Liquid Fuel Co., Ltd., The Baku Russian Petroleum Co., Ltd., the Schibaieff Petroleum Co., Ltd., The Bibi-Eybat Petroleum Co., Ltd., and the European Petroleum Co., Ltd.; each of these companies suffered very heavily during the August-September disturbances. Every endeavour was made to obtain compensation for losses from the authorities in St. Petersburg, but all efforts in this direction failed, it being ruled that British companies trading in Russia should be on the same footing as Russian companies. By way of compensation the Russian Government has issued a loan of 22,000,000 roubles to the producers and refiners on the following conditions: the loan to be paid back in 10 years, with interest at the rate of 5½ per cent.; during the first two years there is no obligatory payment of the loan and no interest, but a guarantee of three-quarters of a copec on each pood of crude petroleum produced. The loan thus issued is to be divided among the various firms and owners according to their actual losses incurred.

As mentioned before, the loss of actual material destroyed by fire was estimated at 27,000,000 roubles, which estimate was based on prices of material before the fires, and labour for reconstruction was not taken into consideration. After the fires the prices of material naturally rose to 35 per cent. above their former quotations, and the total cost of reconstruction, including labour, was estimated at 40,000,000 roubles.

At the beginning of the year under review it was expected that prices for crude and petroleum residuum would be high owing to the prospective shortage: now, however, on account of the incessant stoppage and consequent extra shortage, the prices for crude and petroleum residuum are abnormally high; crude oil being quoted at 26 c. per pood (one pood equals 36 lbs.) for forward delivery and residuum at 27 c. per pood. The following will serve to shew what are the normal requirements:—

It is reckoned that Russia herself requires at least 340,000,000 poods of residuum for purposes of liquid fuel for her own consumption during the year and the replenishment of her stocks. The year is reckoned over a period dating from November to November, this being the approximate date of the closing of the navigation of the Volga, after which date stocks have to accumulate in Baku until the reopening. Taking the following approximate figures for requirements of all products, we have:—

	Poods
Petroleum residuum forwarded into Russia	340,000,000
Through Novorossisk (various products)..	25,000,000
Through Batoum—	
Kerosene	55,000,000
Lubricating oil, etc.	30,000,000
Sent into Russia—	
Kerosene	50,000,000
Crude oil for fuel	30,000,000
Lubricating oil, etc.	5,000,000
Used for fuel in Baku for refining and in production on the fields, loss in leakage and refining, and fuel on the Caspian Sea	100,000,000
Total	635,000,000

Taking into consideration the fact that only half the usual quantity of kerosene was forwarded through Batoum and Novorossisk for export, owing to the lack of demand and lowness of prices abroad, the total requirements for 1905, says the Consul, were about 600,000,000 poods of crude oil, whereas the total output for the year was only just over 400,000,000 poods (official figures not yet issued); this leaves a shortage of some 200,000,000 poods at the beginning of the year 1906. This, of course, is considerably counteracted by the fact that owing to the strikes and stoppages of railways and manufactories in Russia the requirements in Russia were less than usual during 1905. Stocks have not been taken into consideration, as the stocks at the opening of the last navigation were only about 10,000,000 to 12,000,000 poods in Russia, and this may be counted as dead stock, enough to cover the bottoms of the reservoirs and storage tanks. From this it will be easily seen that at the opening of the present navigation the stocks in Russia will be practically nothing, and as the output this year is also expected to be short of the required quantity, very high prices for crude oil and residuum are expected.

In conclusion, Mr. Urquhart says that the effect of this will be by no means detrimental to the British companies trading here, as all these companies have a good production of their own; thus, with steady work during the current year and the present high prices, it is to be hoped that they may be able to recuperate their losses incurred by the destruction of property and the incessant stoppages of the last year.

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO MAY 8th, 1906.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since Apr. 24.	From Jan. 1.	Since Apr. 24.	From Jan. 1.	Since Apr. 24.	From Jan 1.	Since Apr. 24.	From Jan. 1.	Since Apr. 24.	From Jan. 1.	Since Apr. 24.	From Jan. 1.	Since Apr. 24.	From Jan. 1.	Since Apr. 24.	From Jan. 1.
Austria ...	—	874,560	8,000	336,770	10,000	21,000	—	—	—	—	—	—	—	—	18,000	1,243,330
Belgium ...	—	240	12,700	159,800	—	11,000	—	—	—	5,300	—	—	—	1,416	12,700	166,756
Borneo ...	—	210	—	—	—	—	—	—	—	1,849,150	—	240	—	—	—	1,849,600
Canada ...	—	—	—	8,000	—	20,000	—	—	—	—	—	—	—	—	—	28,000
Germany ...	1,247,090	2,008,190	12,590	570,220	—	—	—	—	—	2,320	—	—	—	5,890	1,259,680	2,597,100
Holland ...	—	180	—	920	—	—	—	—	37,530	1,080,510	—	271,000	5,760	22,840	43,290	1,374,970
Roumania ...	—	1,360,000	—	—	—	—	—	1,035,550	—	—	—	—	—	—	—	2,395,550
Russia ...	1,387,200	12,863.960	7,000	813,560	—	—	—	758,500	—	—	—	—	250	5,660	1,394,450	14,441,680
Sumatra, &c	—	—	—	—	—	—	—	—	—	976,500	—	—	—	—	—	976,500
U.S.A. ...	7,271,370	33,966,847	1,263,690	19,018,014	—	523,328	—	18,328,950	987,140	4,636,380	600,000	6.502,880	17,000	413,460	10,139,200	83,379,769
Other Countries	—	870	1,910	11 170	—	—	—	—	—	480	—	—	—	210,800	1,910	223,320
	9,905,660	51,075,057	1,305,890	20,918,454	—	575,328	—	20,123,000	1,024,670	8,550,640	600,000	6,774,120	23,010	660,066	12,869,230	108,676,575

The American Oil Market.

New York, Week ended April 28th.

Gradual improvement in the condition of the roads in the Northern fields is reported, although in some sections field work is still greatly hindered and active operations are still deferred. Evidences of increased activity are, however, afforded by the larger number of completions reported during the past week, and the fact that new rigs are being erected wherever the conditions have improved to an extent to permit the hauling of supplies at normal cost. The results as shewn by the completions reported during the past week have exhibited little improvement, although a number of wells shewing large initial productions have been reported, and in a few instances some extension to previous regarded defined territory is believed to have been established. The larger wells reported are in sections where the production ordinarily decreases rapidly, and it is expected that these new wells will soon settle down to the average of the wells of the field where located. While the total number of completions reported was larger, and some large producers were among these, it is probable that the average production of the new wells shews no important increase, as a very large proportion were small pumpers, and the percentage of failures to find oil has been larger. The advances in the price of the product, the second of 3c. having been announced on Wednesday, will tend to stimulate the search for oils, says the *Oil, Paint and Drug Reporter*, and operations will be pushed considerably in advance of developments in the hope of finding extensions or possibly a new pool. With improving weather we may expect a rapid increase of new work and probably an increase in the number of dry holes, as practically all the available known productive territory in the older fields is under contract or has been exploited, and most of the new work will have to be in as yet untried sections. In the mid-continent fields, the production shews further increase, and is now about 57,000 barrels a day, while the deliveries amount to only about 22,000 barrels a day, consequently stocks are increasing at a rapid rate. In Texas and Louisiana the production shows increase, mainly in the Jennings field, but as consumption has increased at a greater rate stocks are diminishing. Latest quotations are:—Batson 33@39c., as to gravity; Humble, 41c.; Saratoga, 38c.; Sour Lake, 31@47c., as to gravity; Spindle Top, 54c.

Refined and Products.—The demand for refined for export has been more active during the past week, there having been quite an increase in the tank fleet on this side. As yet there has been no change in the conditions abroad to affect our export trade, but it appears the Russians are making steady progress, and will soon be in position to make increasing shipments. The engagements during the past week foot up over 300,000 barrels, all for shipment in bulk.

The price for barreled oil has remained firm at 7·60c. for New York loading, and at 7·55c. for Philadelphia loading. The principal foreign markets are steady. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. 3d. @ 3s. od. to Continental ports, as to port and vessel.

Cases for export have been in active request, and sales of over 400,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in good request, and sales of about 20,000 barrels are reported. Pennsylvania crude is quoted at 7·60c. in barrels.

Crude naphtha continues steady. For export, sales of about 35,000 barrels have been reported.

CLOSING QUOTATIONS.

Crude.		Week ended	
		April 21. 1906.	April 28. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4·70	4·70
Residuum, bbls for export	.. ..	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were:—

	Week ended	
	April 28. 1905.	April 28. 1906.
Tiona	1·44	1·74
Pennsylvania	1·29	1·64
North Lima	0·87	0·98
South Lima	0·82	0·93
Indiana	0·82	0·93
Canadian Oil:		
Petrolia	1·29	1·37

Refined—For Export.

		Week ended	
		April 21.	April 28.
Cargo Lots for export	per gal.	7·60	7·60
In bulk		4·70	4·70
Philadelphia loading		7·55	7·55

Refined in Cases—110 Fire Test.

	Week ending	
	April 21.	April 28.
5,000 to 10,000	10·35	10·35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended	
		April 21.	April 28.
120 fire test, S.W.	per gal...	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ending	
	April 21.	April 28.
Naphtha, crude, car lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	14	14

Pennsylvania Oil Runs from April 20th to April 26th were:—April 20th, 88,791; April 21st and 22nd; 134,458; April 23rd, 52,923; April 24th, 72,000; April 25th, 61,342; April 26th, 58,432.

The Deliveries of Pennsylvania Oil for the same dates were:—80,709; 106,835; 71,215; 63,853; 67,421; 65,835.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended April 27th and from Jan. 1, were as follows:—

	Week.	Year.	1905.
Refined, barrels and bulk	304,500	3,674,700	3,451,100
Refined, cases	357,000	5,471,000	8,398,000
Crude, barrels and bulk	20,000	545,300	345,200
Crude, cases	—	187,000	50,000
Naphtha, barrels	26,300	160,100	155,200
Residuum, barrels	—	288,600	368,400
Lubricating, barrels	—	112,200	54,400
Total, barrels cde. eq.	620,477	8,252,171	8,829,077

Clearances for the Week.

During the week ended Apr. 27th, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1905.
Refined	9,960,790	160,749,200	162,832,991
Crude	—	226,450	621,244
Naphtha	1,085,267	7,342,717	3,335,423
Residuum	—	—	3,294,915

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended April 27th	13,281,053
Total from New York, from Jan. 1, 1906	214,575,397
Same period last year	217,732,899
Decrease	3,157,502
From United States, week ended April 27th	24,822,909
Total from United States, since Jan. 1, 1906	384,132,123
Same period last year	384,647,026
Decrease	514,903

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The "Review" Shipping List.

May 10, 1906.

(*The following abbreviations are used in this table:*—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Sables d'Olonne	Philadelphia	L. Apr. 16
ALCHYMIST	Shoreham	London	Arr. Apr. 24
AMERICAN	New York	Antwerp	Arr. Mar. 6
APPALACHEE	Shanghai	San Francisco	Arr. Apr. 21
APSCHERON	Hamburg	Tyne	Arr. Apr. 17
ARAL	Hamburg	Tyne	Arr. Apr. 20
ARAS	Penarth	Novorossisk	L. May 4
ARGYLL	Buenos Ayres	Rosario	L. May 9
ASTRAKHAN	Philadelphia	Hamburg	Arr. May 7
AUGUST KORFF	London and Plymouth	Philadelphia	Arr. May 8
AUREOLE	London	Tyne	Arr. Apr. 16
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Rouen	Tyne	Arr. Apr. 28
BALAKANI	Manchester	Philadelphia	P. Fastnet, Apr. 29.
BATOUM	Port Arthur (Texas)	London	Arr. May 8
BAYONNE	Philadelphia	Genoa	P. Gibraltar, May 3.
BEACON LIGHT	Batoum	Antwerp	P. Consti'ple, May 8
BEME	Bombay	Rangcon	L. Apr. 13
BLOOMFIELD	Bremerhaven	Tyne	Arr. Mar. 13
BORJOM	Alexandria	Batoum	P. Dardanelles, May 4
BRILLIANT	Bremen	New York	Off I. of. W., May 2
BROADMAYNE	Tyne	Philadelphia	P. Dunnet Head, May 7
BULLMOUTH	Hong Kong	Palembang	Arr. May 6
BULYSSES	Hamburg	—	L. May 9
BURGERMEISTER PETERSEN	New York	Hamburg	Arr. Apr. 25
CADAGUA	Marcus Hook	Alicante	At Gibraltar, May 8, 9
CALCUTTA (Br. bq.)	San Francisco	Shanghai	L. Mar. 14
CARDIUM	Cardiff	BalekPappan	L. Apr. 10
CAUCASIAN	Cardiff	Philadelphia	Arr. May 8
CHARLOIS	Amsterdam	Philadelphia	Arr. May 6
CHESAPEAKE	Avonmouth	Philadelphia	Arr. May 6
CHESTER	Batoum	Antwerp	P. Gibraltar, May 4
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Hong Kong	—	L. May 7
COWRIE	Singapore	—	L. Apr. 25
CYMBELINE	Penarth	Newport	Arr. Apr. 10
CZAR NICOLAI II.	Batoum	Antwerp	P. Algiers, May 4
DAGHESTAN	Genoa	Batoum	L. May 4
DAKOTAH	San Francisco	Shanghai	Arr. about Apr. 9
DELAWARE	Liverpool	New York	L. May 7
DEUTSCHLAND	New York	Rotterdam	P. Scilly, May 9
DIAMANT	Philadelphia	Copenhagen	P. Dunnet Head, May 9
ELAX	Newcastle (N.S.W)	Singapore	Arr. Apr. 25
ELISE MARIE	New York	Rotterdam	L. May 1
ENERGIE	Philadelphia	Hamburg	L. May 3
ERIVAN	Hamburg	Tyne	Arr. May 6
EUPLECTELA	Hamburg	Tyne	Arr. Apr. 10
EXCELSIOR	London	New York & Philadelphia	At New York, May 7
EZIO	—	—	Coasting Peru
FRANCE MARIE	Barcelona	Philadelphia	P. Tarifa, May 4
GEESTEMUNDE	Philadelphia	Swinemunde	L. Apr. 29
GENESSE	Philadelphia	Tampico	P. Del. Break., Apr. 21
GEORGIAN PRINCE	Liverpool	Porto Rico	L. Apr. 19
GOLDMOUTH	Singapore	—	L. Apr. 30
GUT HEIL	New York	Havana	P. Jupiter, Apr. 27
HAINAUT (Dch. shp.)	Alexandria	Antwerp	At Malta, May 7, 8
HARRY WADSWORTH	Liverpool	I ai	L. May 7
HELIOS	New York	Rotterdam	Off I. of W., May 9
HOTHAM NEWTON	Batoum	Hamburg	P. Dover, May 8
HOUSATONIC	San Francisco	Bombay	L. Mar. 28
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Taganrog	Piræus	L. Const'iple, May 2
J.B. AUG. KESSLER	Alexandria	—	P. Aden, May 8
JAMES BRAND	Thameshaven	Tyne	Arr. Mar. 17
KURA	Novorossisk	London	P. Sagres, May 7
LA CAMPINE	Antwerp	Philadelphia	P. Zeebrugge, Apr. 26
LA FLANDRE	Philadelphia	Ghent	L. Apr. 27
LA HESBAYE	Antwerp	Kustendje	L. May 8
LA MADALEINE	Antwerp	Genoa	P. Zeebrugge, Apr. 27
LA VIGUESA	Marcus Hook	Gijon	L. Del. Break., Apr. 1
LACKAWANNA	Philadelphia	Calcutta	Arr. abt. Apr 23
LE COQ	Philadelphia	Blaye	L. Apr. 27
LOUTSCH	Messina	Novorossisk	P. Dardanelles, May 4
LUCERNA	Tyne	Philadelphia	P. Dunnet Hd., Apr. 30
LUCIFER	Philadelphia	Rotterdam	Arr. May 7
LUCIGEN	Tyne	Philadelphia	Arr. May 7
LUCILINE	Philadelphia	Rouen	L. May 6
LUMEN	Bouc	Algiers and Batoum	L. May 5
LUX	New York	Rouen	L. Apr. 26
MAKKAVEI	Batoum	Odessa	L. Apr. 21
MANHATTAN	Venice	Philadelphia	P. Tarifa, Apr. 27
MANNHEIM	Hamburg	New York	L. Tyne, May 9
MARGARETHA	Middleburg	Kustendje	P. Gibraltar, May 8
MEXICAN PRINCE	Tyne	Cienfuegos	Arr. Apr. 18 and L. April 21
MIRA	New York	Bombay	L. Suez, Apr. 27
MUREX	Soesoe	Bombay	Arr. Apr. 30
NARRAGANSETT	London	New York	P. Prawle Pt., May 3
NERITE	Balekpappan	—	L. May 3
NEW YORK	New York	Southampton	Arr. May 6
OCEAN	Amsterdam	New York	P. Scilly, Apr. 30
ORANJE PRINCE	Tyne and Manzanillo	Banes	Arr. May 1
ORIFLAMME	New York	Rouen	P. Lizard, May 8
OSCEOLA	Norfolk (Va.)	Belize and Bluefields	At Belize, Apr. 17
OTTAWA	Philadelphia	Galveston & Vera Cruz	L. Apr. 27
OURAL	Antwerp	Batoum	L. Gibraltar, May 6
PALEMBANG	Bangkok	Palembang	L Apr. 9
PAULA	Philadelphia	Havre	L. May 1
PECTAN	New Orleans	Port Arthur (Texas)	Arr. May 5
PENNOIL	Tyne	Philadelphia	At Del. Break., May 4
PERLAK	Calcutta	Aros Bay	L. Apr. 4
PHOEBUS	New York	Rotterdam	Arr. May 5
PINNA	Port Arthur (Texas)	—	L May 1
POTOMAC	Dublin	Philadelphia	P. Fastnet, May 2
PROMETHEUS	Tyne	New York	P. Dunnet Hd., May 9
PRUDENTIA	Swansea	Kustendje	P. Consti'ple, May 8
RION	Cronstadt	Tyne	Arr. Oct. 28
ROCK LIGHT	London	Cardiff and Constant'ple	At Cardiff, Apr. 26
ROSSIJA	Hamburg	Batoum	Off I. of W., May 10
ROTTERDAM	Rotterdam	New York	Arr. May 3

Vessel.	From.	For.	Latest Date and Position.
RUSSIAN PRINCE	Philadelphia	Havana	L. Apr. 27
SALAHADJI	Singapore ..	Sanga Sanga	L. Mar. 27
SEMINOLE	Calcutta	San Francisco	Arr. Apr. 11, in pt. Apr. 21 all well
SILVERLIP	Manchester	Cardiff......	Arr. May 9
SINGU	Kurrachee ..	Rangoon....	L. Apr. 5
SNOWFLAKE	Hull........	Port Arthur (Texas)	P. Prawle Pt., May 5
SOPHIE	Savona	Genoa......	Arr. May 2
SPONDILUS	East Indies	—	P. Las Palmas, May 9
STANDARD	Philadelphia	Swinemuude	L. May 4
STROMBUS	Cardiff	Singapore ..	Arr. May 8
SURAM	Batoum	London	L. May 4
SUWANEE	New York ..	London	At Thameshaven, May 8
SVIET	Batoum	Odessa	L. Mar. 31
TELENA	Cardiff......	Singapore ..	L. Port Said, May 9
TEREK............	Batoum	Manchester	Arr. May 1
TIFLIS	Manchester	Batoum	L. Const'iple, May 4
TIOGA	Batoum	Liverpool ..	Arr. Nov. 25 in pt. May 7
TONAWANDA	Kurrachee ..	Newcastle .. (N.S.W.)	Arr. Apr. 30
TROCAS	Hankow	—	L. Shanghai, May 4
TURBO	Cardiff	Philadelphia	P. Barry Island, May 6
TUSCARORA......	New York ..	Calcutta	Arr. abt. Apr. 30
TWINGONE	Calcutta	Rangoon....	L. Apr. 7
VEDRA	Tyne	Ibrail	L. May 9
VILLE DE DIEPPE	Dieppe......	Havre	Arr. Apr. 26
VILLE DE DOUAI	Philadelphia	Calais	L. Apr. 26.
VOLUTE	Hankow	—	L. May 4
WEEHAWKEN	Tyne	New York ..	P Butt of Lewis, May 5
WILLKOMMEN ..	Stettin & Tyne	Philadelphia	P. Dunnett Hd., Apr. 28.
WINNEBAGO......	San Faancisco	Hong Kong	At Yokoha. prev. May 10

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

May 11th, 1906.

Petroleum remains unchanged since our last report, quotations being as follows:—

Russian and Roumanian, 6d.; American, 6¼d. Water White, 7¾d.

LUBRICATING OILS

are unchanged, latest quotations being:—

American pale, £7 15s. to £9 10s.
American dark cylinder, from £7 10s.
American filtered cylinder, from £11.
Shellene, £5.

TURPENTINE.

American turpentine has been very firm, and is considerably higher in price since our last report. For Spot it is quoted 48s. 6d. to 48s. 9d; June, 47s. 6d.; July, 45s. 6d.; and July to December 44s. 6d.

LIVERPOOL OIL MARKET.

May 10th.

Refined oils are quiet, and sellers now quote 5⅞d. for Russian, Galician or Romanian; and 6⅝d. to 7⅞d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, May 10th.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, May 10th.

Standard White is quoted at 7·55.

RUSSIA.

Baku, May 7th.

The Baku oil market is gradually returning to normal conditions. A number of important deals have been concluded for prompt and future delivery. The prices are: Light crude oil, spot, 24¾-25 copecs per pood; kerosene, in ships, future delivery, 28 copecs; residuals, spot, 27 copecs per pood.

BELGIUM.

Antwerp, May 7th.

The petroleum market is unchanged, and sales are made only for immediate requirements. Price of Standard White, spot, 19½ francs; May, 19½ francs; June, 19⅝ francs last four months.

GERMANY.

Hamburg, May 7th.

The kerosene market is firm. The price of American Standard White is 7·10 marks per 50 kilos.

ROUMANIA.

May 9th.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs. ...	3·50-3·60
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery ...	3·00- —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural...	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail, including octro tax of 12 fcs. per 100 kilos

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
,, sp. gr. 0·720-0·725	8·00- 9·00
,, sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

Bombay, Aprll 21st.

Market unchanged on prices.

American, "Snowflake," 150 deg.	Rs.	6	0	2
,, Chester, 125 deg.		4	8	2
,, Monkey Brand, 125 deg.		4	2	2
Russian, "Anchor," 125 deg.		4	14	0
,, "White Camelia" brand, 125 deg. ..		4	0	2
Borneo Cobra, in tins, per pair		3	3	0
Sumatra "Rising Sun," bulk		2	15	0
,, "Rising Sun," bulk, in local made tins ..		3	10	0
,, Silverlight Cases, per case		4	8	0
Burma Oil, in bulk, per 8 imperial gallons		2	11	0
,, "Elephant" brand, in local made tins ..		3	10	0
,, Bulk, in Bombay Bazaar, 125 deg. per 10 gallons..		3	3	6
Borneo oil in bulk		2	14	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED MAY 1st, 1906—

Date	Port and Importers	Description.	No. of Galls.	Port Whence.
April.	London—			
25	Fielder, Hickman and Co.	Lub	19,840	New York
25	Anglo-American Oil Co. ..	,,	24,200	,,
25	,, (August Korff)	Lamp	88,470	,,
26	,, (Narragansett)	,,	3,123,320	,,
26	J. Barber and Co.	Lub. Gr.	900	Hamburg
26	G. W. Sheldon and Co. ..	Lub.	630	Antwerp
27	Mordaunt Bros.	,,	26,400	Philadel.
28	W. Balchin	,,	10,000	,,
28	Pure Oil Co.	,,	3,200	,,
28	Fielder, Hickman and Co. ..	,,	10,800	,,
28	T. S. Harris and Co. ..	,,	4,000	,,
30	Wilkins, Campbell and Co.	,,	4,560	,,
30	Anglo-American Oil Co. ..	,,	35,000	,,
30	G. W. Sheldon and Co. ..	,,	300	Antwerp
30	London Oil Storage Co. ..	,,	1,680	Hamburg
May.				
1	A. Brown and Co.	Lamp	4,000	Philadel.
1	Ragosine and Co.	,,	3,860	,,
1	Perkins and Howes	Lub.	1,600	,,
April	Liverpool—			
26	R. Bulman and Co.	,,	1,000	Vera Cruz
26	Liverpool Storage Co. ..	,,	3,680	New York
26	W. B. Dick and Co.	,,	14,310	Philadel.
26	Vacuum Oil Co.	,,	25,600	,,
26	Worthington and Boler ..	,,	2,600	,,
27	Meade-King, Robinson & Co.	,,	20,800	,,
27	Crew, Levick and Co. ..	,,	29,330	,,
May				
1	Thompson, McKay and Co.	,,	220	New York
1	Vacuum Oil Co.	,,	14,680	,,
1	Liverpool Storage Co. ..	,,	13,200	,,
1	,, ...	,,	3,600	,,
1	,, ...	,,	12,400	Philadel.
1	W. Gibson and Co.	Lamp	2,050	Boston
1	Pickfords	Lub.	550	Hamburg
1	Gandy Belt Manufac. Co. ..	,,	240	Antwerp
April.	Bristol—			
26	First Anglo-Russian Oil Co.	,,	520	Hamburg
26	W. G. Clarke	,,	1,360	Antwerp
28	W. Smith and Co.	,,	35,040	New York
28	,, ...	Lamp	13,400	,,
28	Pritchard and Co.	Lub.	2,500	Antwerp
	Grimsby—			
27	J. Sutcliffe and Sons ..	,,	1,200	,,
	Hull—			
26	Moran and Co.	Crude	250	Reval
26	W. Gilyott and Co.	Lub.	6,040	New York
26	Anglo-American Oil Co. ..	,,	28,160	,,
27	,, (Snowflake) ..	Lamp	951,530	Philadel.
19	Wilsons and N. E. Railway Shipping Co.	Lub.	1,100	Antwerp
	Manchester—			
25	W. Hodgson and Co. ..	,,	1,000	New York
26	A. Peploe	,,	250	,,
26	Liverpool Storage Co. ..	,,	18,890	,,
26	Geo. B. Taylor	,,	178,760	,,
April.	Southampton.			
26	Barringer and Sons (Aras)	Lamp	476,000	Hamburg
	Grangemouth—			
26	J. Currie and Co.	Lub.	400	,,
	Leith—			
26	J. Cormack and Co. ..	,,	3,600	Riga
28	W. Graham Yooll and Co.	Lamp	1,090	Hamburg
	Belfast—			
26	G. Heyn and Sons	Lub.	1,000	Riga
	Dublin—			
26	Palgrave, Murphy and Co.	,,	540	Antwerp
27	Anglo-American Oil Co. .. (Potomac)	Lamp	1,285,440	Philadel.
	Total for Week		6,515,270	

FOR THE WEEK ENDED MAY 8th, 1906—

Date	Port and Importers	Description.	No. of Gals.	Port Whence.
May.	London—			
3	A. Brown and Co.	Lub.	2,400	Philadel.
3	W. Balchin	,,	5,000	,,
3	Anglo-American Oil Co. ..	,,	12,000	New York
4	Grindley and Co.	,,	2,000	,,
4	A. Duckham and Co. ..	,,	2,400	Riga
4	T. H. Lee	,,	1,250	Hamburg
5	London Oil Storage Co. ..	,,	1,670	,,
5	G. and H. Green	,,	3,330	New York
5	Shell Transport Co. (Batoum)	Fuel	168,000	Pt. Arthur
5	,, ,, ,,	,,	432,000	,,
5	Anglo-American Oil Co. .. (Suwanee)	Lub.	121,180	New York
5	,, ,, ..	Benz.	135,160	,,
5	,, ,, ..	Naph	128,870	,,
5	,, ,, ..	,,	719,870	,,
7	G. W. Sheldon	Lub.	350	,,
7	Scott's Wharf	,,	2,000	,,
7	Mordaunt Bros.	,,	2,500	,,
7	Humphrey and Co.	,,	6,440	,,
7	H. Finkler and Co.	Resid	10,000	Trieste
7	J. Harrison, Ltd.	Lub.	690	Trepor
8	Anglo-American Oil Co. ..	,,	12,000	New York
8	Fielder, Hickman and Co. ..	,,	12,480	,,
8	Juett and Cain	,,	3,500	,,
8	R. F. Downing and Co. ..	,,	310	,,
8	George Sheldon and Co. ..	Lub. Gr.	150	Antwerp
8	London Oil Storage Co. ..	Lub.	1,710	Hamburg
8	L. and India Dock Com. ..	,,	500	Suez
	Deduct to Correct.			
29/3	Shell Trans. Co. (Timsah) ..	Fuel	86,400	Amsterdam
15/3	Anglo-American Oil Co. ..	Lamp	1,163,790	New York
	Liverpool—			
3	Cunard Steamship Co. ..	Lub.	1,400	,,
3	,, ..	,,	103,880	,,
3	,, ..	M. Colza	9,000	,,
3	Valvoline Oil Co.	Lub.	14,350	,,

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Date. May.	Port and Importers.	Description.	No. of Galls.	Port Whence.
3	An.-Amer. Oil Co. (Delaware)	Lamp	1,302,900	New York
3	Meade-King, Robinson & Co.	Spirit	20,030	Rotterdam
4	Geo. B. Taylor	Lub.	29,200	New York
5	Vacuum Oil Co.	Lub.	17,720	,,
5	Meade-King, Robinson & Co.	,,	7,280	Baltimore
7	Burnaby and Chantrell ..	M L. Gr.	19,060	New York
8	E. Bennatt and Co.	Benz.	3,240	Norfolk
8	Liverpool Storage Co. ..	Lub.	3,400	New York
8	Ismay Imrie and Co. ..	M.L. Gr.	22,160	,,
22	Anglo-Amer. Oil Co. (Lucifer)	Gas	62,500	,,
	Bristol—			
2	Western Pet. Co. (Arras) ..	Lamp	770,000	Hamburg
3	W. Smith and Co.	Lub.	3,000	New York
3	Pickfords, Ltd.	,,	400	Hamburg
	,, ...	Lub. P.	300	,,
3	H. R. James and Sons ..	Lub.	4,000	New York
3	,, ..	M.Colza	5,000	,,
5	Pickfords, Ltd.	Lub. P.	1,300	Hamburg
5	W. Smith and Co.	Lub.	45,600	New York
5	,, ..	Lamp	20,400	,,
5	Collins and Co.	Lub.	3,000	,,
5	H. R. James and Sons ..	,,	6,000	,,
5	,, ..	M.Colza	2,000	,,
	Hull—			
2	W. Gillyott and Co... ..	Lub.	8,000	Trieste
3	Hull and Neths. S.S. Co. ..	Tar Oil	3,600	Rotterdam
3	,, ..	,,	2,160	,,
	Manchester—			
3	Consolidated Pet. Co. (Terek)	Lamp	1,387,200	Batoum
3	J. T. Fletcher and Co. ..	Lub.	400	Antwerp
4	General Petroleum Co. ..	Lamp	476,000	Port Arthur
7	Bramwell Fern and Co. ..	Lub.	3,070	New York
7	Meade-King, Robinson & Co.	,,	4,800	,,
8	George B. Taylor	,,	118,000	Philadel.
8	Liverpool Storage Co. ..	,,	7,580	New York
3	Tyne-Tees S.S. Co... ..	Lub.	1,200	Antwerp
4	C. Hassell & Son	M. Lub.	5,200	New York
4	,, ..	Lub.	20,160	,,
4	,, ..	,,	19,800	,,
	Newcastle—			
7	Tyne-Tees S.S. Co... ..	,,	280	Antwerp
7	,, ..	,,	3,200	,,
	Swansea—			
3	Burgess and Co.	,,	2,000	New York
	Glasgow—			
3	Anchor Line	,,	20,480	,,
3	,, ...	,,	14,400	,,
4	J. D. Smellie..	M. Spt.	17,500	Rotterdam
8	J. and A. Allan	Lub.	16,000	Philadel.
	Grangemouth—			
8	Anchor Line	M. Lub.	34,120	New York
4	J. Currie and Co.	Lub.	240	Hamburg
	Lieth—			
3	Geo. Gibson and Co. ..	,,	2,100	Antwerp
3	W. Graham Yooll and Co.	,,	1,090	Hamburg
3	J. Cormack and Co... ..	,,	580	,,
3	T. Cowan	,,	720	Treport
	Total for Week		5,165,470	
	Total for the past Fortnight ..		11,681,740	

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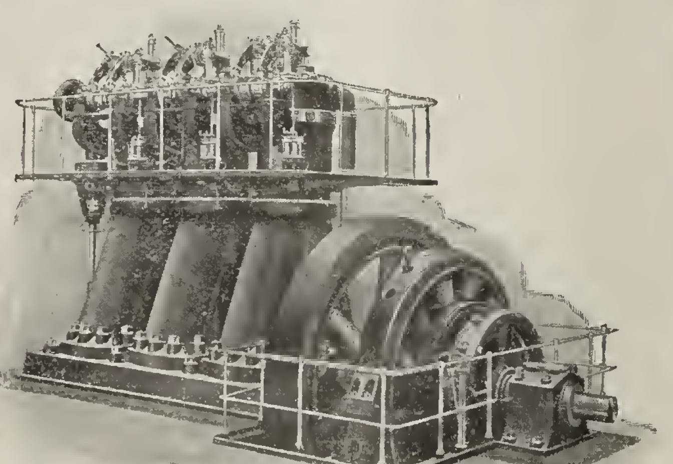

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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XIV. *(New Series.)* May 26th, 1906. No. 373.

Editorial Notes.

Baku's Natural Gas turned into Account.

The question of the utilisation of the natural gas at the oil fields of Baku is now seriously occupying the attention of both petroleum producers and engineers, and it is quite within the region of probability that ere long this new power will be installed throughout the Baku field for working the boring and pumping machinery. So far, only one firm is using natural gas as fuel at its wells, but the economical aspect of the question is such that many large producers are already taking the matter seriously in hand. The chief of the Mines Bureau of the Caucasus is also considering the subject, and at the present time a scheme is being worked out for leasing the Government lands in the Baku district for the exploitation of natural gas, the future importance of which is now recognised, even by the Government officials. The deposits at Surakhany, which have been encountered at a shallow depth, prove to be very extensive, and if only turned into proper account, they may revolutionise the Caucasian petroleum producing industry, inasmuch as the use of natural gas at the wells will immediately set free very large quantities of crude oil which can be put to more advantageous use.

The Return of Normal Conditions.

It is a matter for congratulation that operations at the Baku oil fields have so far righted themselves that normal conditions will again shortly prevail. During the past month the fields produced over 41,000,000 poods of oil, which amount is a distinct advance in the right direction, though naturally the normal requirements cannot be met until the monthly figures shew an output of about 50,000,000 poods. The scene of desolation presented at the fields after the disturbances last year has now given place to most encouraging signs of life, and every effort is being directed toward substantially increasing the production. Each month this year has so far registered a decided increase in the output over its predecessor, and the April figures are nearly 3,000,000 poods ahead of the total yield during March, while that month was an advance of about 8,000,000 poods over the figures of February. The total production for the first four months of the present year has amounted to about 145,000,000 poods, or nearly 40,000,000 poods short of the yield for the corresponding period of last year, and a decrease of 50,000,000 poods against the figures for the first four months of 1904. Still, events are moving toward a return of normal conditions at a not far distant date, and, provided that no fresh troubles tend to pull matters back, the chaotic state of Russia's petroleum industry will shortly be a thing associated only with its past misfortunes.

Galicia and its Petroleum Industry.

In Galicia, too, the petroleum industry is making considerable headway, and though a somewhat indefinite state of things exists regarding the future working of the Petrolea organisation, a subject to which we refer at length upon another page, which may greatly impede the organisation of the export trade, there can be no two opinions as to the progress which is now being made from the point of view of production. The details in this direction for March shew that a considerable increase in the production of crude oil was recorded, this being mainly due to the encountering of what is looked upon as a new oil stratum. Those who have followed recent boring successes in Galicia will recollect that in the "Hecla" well, at Boryslaw, a yield of nearly 400 tons of crude oil daily has been obtained from a depth of slightly under 1,200 metres, at which depth it is believed the fourth oil stratum exists. Should this supposition prove to be correct, a further and more substantial increase in Galician petroleum production may be expected at an early date, for many producers have already decided to deepen their borings until the above-mentioned depth is reached.

A New Producers' Organisation.

Possibly it is nothing more than a mere coincidence, but just at a time when the life of the organisation known as the Petrolea is in the balance, a new association has been formed which, judging by the inaugural meeting held a few days ago at Drohobycz, promises much success. At the meeting of petroleum producers in question, representatives were present from the operating firms owning two-thirds of the production of the Boryslaw-Tustanowice fields, and their decision to consider the agreements with the Petrolea Co. as annulled, and to establish an an entirely new organisation, marks the commencement of a new era in the petroleum industry of Galicia. The new organisation, which, it will be noted is one for the producers, is to have its own storage tanks at various centres, and for this purpose a good sum of money was subscribed by those present at the initial meeting. We understand also that three of the largest pipe line companies have declared their readiness to fully support the producers in their present efforts at combination, and in view of the amicable feeling which now prevails among the petroleum producers, the new organisation enters the field at a most opportune time, and with every prospect of success.

The American Fields during April.

The report of operations and their results in the American fields for the month of April is singularly like that for the preceding month not only in the amount of work completed and of new production, but in the results, though if anything the percentage of failures to find oil in paying quantities in the new wells in the Pennsylvania regions is greater than was the case during March. The fact that crude oil prices have advanced of late, has not been a great inducement to explore new territory, and where efforts have been made to open out fresh districts, these have only been partially successful. Therefore, so far as the older producing States in the Pennsylvania district are concerned, there appears to be little prospect of increasing the production, though the occasional extensions of producing territory will doubtless be sufficient to check any downward tendency for a time to come. With regard to the Mid-Continent fields, Kansas and Indian Territory are still suffering by reason of the storage problem, and though strenuous efforts are being made to provide ample facilities for the product when once above ground, the producers are still hampered. From Texas, the news is very gratifying, for in spite of some of the more well-known fields shewing a slight falling off, a new territory in Brazoria County is being very rapidly—and at the same time successfully—developed, while California continues to increase her production, though naturally the recent disaster in San Francisco has had a tendency to temporarily divert attention.

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BAKU PRODUCTION DURING APRIL.

The total output of crude oil at the Baku oil fields in April amounted to 41,539,213 poods, of which 11,709,865 poods were produced at Bebe-Aibat. The production by spouters was: 28,500 poods at Bebe-Aibat, and 1,303,800 poods at Saboontchi, or a total of 1,332,300 poods.

The production of the principal firms at the oil fields during April was as under:—

	Poods.
Nobel Bros.	5,200,000
Caspian and Black Sea Society	3,000,000
Baku Naphtha Co.	2,400,000
Caspian Society	2,300,000
Mantacheff and Co.	1,900,000
Moscow-Caucasian Co.	1,700,000
M. Nagieff	1,300,000
Ter Akopoff Co.	1,300,000
Zoubaloff	1,100,000
Russian Petroleum and Liq. Fuel Co., Ltd.	1,100,000
Assadulaeff	1,100,000
Baku Russian Petroleum Co., Ltd.	1,100,000
Russian Naphtha Co.	1,100,000
Pitoeff and Co.	1,100,000
Mirzoeff Bros.	1,100,000
Aramazd Co.	1,000,000
Bibi-Eybat Petroleum Co., Ltd.	900,000
Schibaieff and Co.	800,000
Naftalan Co.	700,000
Tumaeff and Co.	600,000
European Petroleum Co., Ltd.	500,000

The total production of crude oil at the oil fields for the first four months of this year has amounted to 145,000,000 poods, against 182,000,000 poods in the corresponding period of 1905 and 194,800,000 poods in 1904.

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DEVELOPING THE SHALLOW STRATUM IN THE HUMBLE FIELD.

The shallow stratum at Humble is now occupying the centre of the stage among the South Texas oil fields. The production of the field is approximately 8,000 barrels daily, and most of this is shallow stratum oil. Some of the wells produce when first brought in about 500 barrels and then drop to from 150 to 200-barrel pumpers.

The shallow oil is found at a depth of about 500 feet, and the producing territory covers a wide area, in fact, it is the belief among those who are operating in Humble that the shallow stratum covers an area equal to that of the deeper stratum. Operations are very active, and there are more than two score rigs in operation and getting ready to operate. At the present price of oil, coupled with the economy in sinking the shallow wells, those producing from 150 to 200 barrels are considered good paying propositions.

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ROUMANIAN PRODUCTION IN MARCH.

The output of crude oil at the various oil fields in Roumania during March compared very well with February, the figures being as under:—

	March. Tons.	February. Tons.
Prahova District—		
Bustenari	39,891	35,462
Campina-Poiana	7,441	6,042
Moreni	10,877	6,125
Baicoi-Tinta	4,342	3,832
Other fields	658	589
Total	63,199	52,050
Dambovitza District	1,462	1,604
Buzeu District	1,046	879
Bacau	794	736
Grand total	66,496	55,300

If to the figures shewn above we add the quantities produced by firms, whose output is not included in the above, we get a total output for March of the record figure of 70,000 tons.

The output of the leading firms in March, compared with the figures of February, is given below:—

	March. Tons.	February. Tons.
Steaua Romana—		
Bustenari	9,732	8,068
Campina-Poiana	6,188	4,674
Baicoi	2,919	3,137
Other Fields	1,379	1,202
Total	20,218	17,081
Bustenari Co.	10,568	10,008
Telega Oil Co.	6,349	6,071
Campina-Moreni Co.	6,435	3,608
International Co.	3,357	3,428
Moreni Co.	2,730	2,650
Trajan Co.	2,171	1,894
Aquila Franco-Romana Co.	1,346	945
Arnheemsche Petroleum Co.	1,010	988
Seceleanu Bros.	998	552
Colombia Co.	977	837
Grigorescu and Vladescu	950	777
Romano-American Co.	1,963	134
Olandeza-Romana Co.	905	379
Stanescu and Guiglescu	730	746

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A WELL-KNOWN OIL MAN STARTS BUSINESS IN LONDON.

As will be seen from our advertisement columns, Mr. Chittenden, whose departure to Borneo was chronicled in our issue of March 12th, 1901, has now returned to England, and started in business for himself. The experience gained as chief of the export department at Messrs. M. Samuel and Co. for nine years, and for the last five years as local general manager of the Borneo oil fields, should make his services invaluable to petroleum producers. Not only has he experience in buying plant for the boring, producing, storing, refining and transporting of petroleum, but he has also the practical experience in the erection and working thereof gained in the past five years. The continued and rapid rise in the production of the Borneo oil fields go to prove his ability in this direction, and we have no doubt that those requiring material in which Mr. Chittenden deals will do well to consult him.

SCOTCH OIL COMPANIES.

Another Highly Successful Year. . . . . . .

THE OAKBANK OIL COMPANY.

The annual meeting of the shareholders of the above company was held in the Religious Institution Rooms, Glasgow, a few days ago—Mr. John M. Easton in the chair.

The Chairman, in moving the adoption of the report, said he was gratified at submitting another successful year's work—successful notwithstanding a heavy fall in the value of liquid products. Oil had risen from low prices, and would further improve unless there was a recurrence of competition by foreign importers. With improved apparatus and methods now in use, provided the past yield be maintained with a minimum of cost, the stability of the Scotch oil trade was practically assured. The relations of the company with their workmen continued good, and the men enjoyed continuous work at good wages, thus sharing with the shareholders the prosperity of the company. The directors had seen fit to relinquish the shale on the lands of Humbie, as they found that the shale was not there in workable quantity. They were led to examine by boring the strata underlying the Dunnet and Barrack shale in their present land at Duddingston, and they found two additional seams of workable shale. If these seams lay in the same position as the Dunnet and Barrack shale then the condition of the company as to shale reserves would be very considerably improved. Operations were now being undertaken with the object of verifying that. The shareholders would be pleased that the directors had been able conveniently and successfully to carry through the proceedings necessary to enable the shares of the company to be equalised; and it would be no less gratifying that the directors were about to give effect to the views expressed at the last and previous general meetings to sub-divide the shares. A resolution by the shareholders authorising the sub-division could not be adopted until the equalisation of the shares had been effected, and therefore it would be necessary to hold another meeting after the 31st inst. for that purpose. The Chairman added that, while giving a good dividend, the directors were not unmindful of building up the position of the company by setting aside adequate sums against depreciation and other reserves. Mr. John Murray seconded the motion, which was approved. Messrs. Robert T. Moore and John Wishart were re-elected directors, and Mr. John Wilson, C.A., was re-elected auditor.

THE PUMPHERSTON OIL COMPANY, LTD.

The report of the Pumpherston Oil Co., Ltd., to be submitted to the meeting at Glasgow on Tuesday states that after providing for maintenance of works and mines during the year, and including £3,905 brought forward from last year, there is a balance at credit of profit and loss account of £98,420 for the year ended 30th April last. The directors propose to write off for depreciation £10,000, and off the amount expended on improved plant during the year £23,556, placing to reserve fund £20,000, paying a dividend at the rate of 30 per cent. per annum on the ordinary shares, carrying forward £5,056. There has been no capital expenditure during the year. The sum of £23,555 has been expended on improved plant, including an extension which has been made to the refinery at Pumpherston, and the directors recommend that the whole of this should be written off. Debenture bonds amounting to £15,260 have been redeemed during the year, and the directors expect that all the remaining bonds, which amount to £21,770, will be paid off before the end of the current year. It is proposed to add £20,000 to reserve, bringing that fund—which is being used in the business of the company as working capital—up to £60,000. There has been little change in the value of sulphate of ammonia and solid paraffin as compared with the previous year, but prices realised for all oil products were considerably lower, the drop on the year's production amounting to about £20,000. This serious fall in prices has been fully met by improved methods of working and increased business. The prospects for the current year are stated to be of a satisfactory nature.

THE BROXBURN OIL COMPANY.

The twenty-ninth annual general meeting of the shareholders of the above company was held last week at the offices of the company, Glasgow. Sir David Richmond, the chairman, presided. In moving the adoption of the report, he said that this year the shareholders had very special reason to congratulate themselves on the position of the company. During the past year, in the matter of sales, the company, in common with others, had had a very unusual experience. Hitherto the prices of products had seldom moved almost entirely in one direction. Last year, however, had been a marked exception to the general rule, inasmuch as the values of nearly all their manufactures had been lower than in the previous year, the decrease amounting in the aggregate to about £23,000. This was a somewhat startling figure, and yet it enabled him to give point to other considerations of a more cheerful nature. In the first place they might hope that, prices being now nearly all at a moderately low level, there was not much chance of them going lower. Indeed, the tendency was already the other way, some advance having taken place in the price of lubricating and gas-making oils, and as regarded naphtha, while no advance had yet taken place, the outlook was distinctly promising, in consequence of the great and continually increasing demand for the lighter qualities of petroleum spirit for motor use. Paraffin wax would probably remain somewhat stationary in value. While the production in America was likely to be less than formerly, the quantity obtained from some of the Galician crude oils had in recent years added considerably to the world's supplies, otherwise the price of this product would probably have been higher than it was to-day. Commercially considered, therefore, they thought that the outlook for the industry might be regarded as at least hopeful. Turning to the mining and manufacturing side of the company's operations, where more or less complex problems constantly arose, calling not only for careful consideration, but on the right solution of which the company's progress so largely depended, the Chairman said he need hardly remind the meeting that they had been spending a good deal of money during the last three or four years, and the shareholders might now very reasonably want to know whether it had all been spent to good purpose. The first thing to be considered was the supply of shale. At considerable cost carefully located bores were put down over the whole of their mineral field both north and south of Broxburn. The result of these bores had been quite satisfactory, and not only amply justified the subsequent outlay on plant renewal work, but enabled them to enter into negotiations with their landlord for an extension of their mineral leases, and these negotiations had resulted in a concluded agreement extending their various leases till Martinmas, 1946. These bores had also enabled them to determine the best points at which to locate future pits or mines. The next thing to receive serious attention was the form of retort likely to give the best results with the various shales they had to deal with, and that was not finally determined until after very extended experimental work had been completed. More recently they had introduced various improved methods at their acid works, in their paraffin sheds, and in the refinery generally, from all of which they were satisfied that very decided advantages to the company would accrue even beyond what had already been realised. Meanwhile, perhaps the best measure of the improvement already secured from the expenditure referred to and from the changes to which he had alluded was the fact already mentioned, that although this year they had suffered in prices to the extent of nearly £23,000, they had yet been able to shew an increased balance of profit over last year of more thon £3,000. For these reasons he thought they might specially congratulate themselves on the position of the company, and that they might regard the future not only hopefully but with confidence. The Chairman concluded by moving the adoption of the report, and that a dividend be paid at the rate of 6 per cent. on the preference shares, less income tax, and at the rate of 15 per cent. on the ordinary shares, free of income tax.

Mr. J. Watson Stewart seconded, and the motion was adopted, a vote of thanks being passed to the Chairman, the meeting concluded.

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La Mediterranee.—A new company, under the title of La Mediterranee, has been formed by Mr. Giacomo Calo, shipowner, of Tunis, for the purpose of trading in petroleum. The capital is 2,000,000 francs. The company is now erecting tank installations at Catania, Sicily, at Bône, in Algeria, and at La Goulete in Tunis. Branches and agencies will be established in various other places in Sicily, Sardinia, Malta and Italy. The registered office of the company will be in Tunis, and the central administration in Rome. The company proposes to deal particularly in Roumanian petroleum.

PATENTS.

Applications for Patents and Patent Applications recently published relating to the Petroleum Industry.

Specially contributed by Messrs. EDWARD EVANS & Co., of 27, Chancery Lane, London, W.C., and 105, Colmore Row, Birmingham, Consulting Engineers, Chartered Patent Agents and Enrolled Patent Attorneys of the United States.

Applications Filed in Great Britain.

An Apparatus for the Purification of Oils containing Water and such like extraneous matter.—Alexander Duckham, Millwall, London. No. 10919 of 1906.

Improved Process for Refining Oils, Fats, Waxes or the like.—John Kingsford Field, London. No. 10960 of 1906.

Applications Published in Great Britain.

Process and Apparatus for the Production of Coke, Ammonia, Illuminating Gas, Tar, Benzol, and Other Products by the Distillation of Coal, Lignite, Turf and Other Carbonaceous Materials.—Jacques Gerard Aarts, of Dongen, Holland. No. 8187 of 1905.

This relates to a process for the production of coke and by-products, in which the material is continuously fed into one end of a suitably-arranged retort of a cross section, uniform along its whole extent, and heated by heating gases externally applied to the upper half of the retort, the heating gases being conducted through screw-shaped channels in the wall of the retort and the material being discharged at the other end of the retort, which is water-sealed, and consists in the arrangement whereby the material passes through regions of temperature ranging from a minimum temperature to a maximum temperature, and then passes through regions of temperature gradually diminishing, the retort being not cooled externally by an air current at the latter part.

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AMERICAN PATENTS GRANTED.

Well-Drilling Machine.—John W. Shawver, Portland, Ind.

In a well-drilling machine having in combination two main frame sections, ground wheels on which the said main frame sections are mounted, an axle for each pair of ground wheels, the forward section having a walking beam mounted thereon, the frame of said front section being formed of a pair of main sills spaced apart and extending to the rear beyond the rear wheels of said front section and forwardly terminating in the rear of the front wheels thereof, auxiliary sills extending from the sides of the main sills forward and being pivotally mounted to the axle of the front wheels, a derrick extending over and above the sections, means for securing the derrick in position, and means for raising and lowering the derrick by power transmitted through the mechanisms located on the machine.

Well Drilling Machine.—John W. Miller, Akron, Ohio.

This is a device comprising a portable frame, a boiler carried thereby, an engine carried by the frame, connections between the and the engine, a transversely-extending shaft mounted above the top edge of said frame, a pulley mounted on one end of said shaft, a belt connection between said pulley and said engine, a crank-arm secured to the opposite end of said shaft, and provided with a plurality of perforations, a transversely-extending second shaft mounted above the top edge of said frame at one side of said first-mentioned shaft, a two-part crank-arm the parts of which are separable from each other fixedly secured to one end of said second shaft, and provided with an elongated slot, a wrist-pin detachably mounted in any one of said perforations and extending through said slot, a pair of shoes carried by the free end of the wrist-pin and engaging the longitudinal walls of said slot for operating said separable crank-arm when the perforated crank-arm is operated, said perforations in said crank-arm permitting of the adjusting of the wrist-pin to vary the stroke imparted to the separable crank-arm, a single and upwardly-extending oscillatory arm fixedly secured on said second shaft intermediate the sides of said frame, an open-spudding cable-receiving sheave mounted on one side of said oscillatory arm, movable in unison therewith and adapted to permit of the detaching of the cable without removing the said oscillatory arm, a cable-reel mounted for rotation above the top edge of said frame, a derrick at one end of said frame, a cable on said reel extending therefrom to and partially around said cable-receiving sheave to the top of the derrick, and adapted to be actuated by the oscillations of said cable-receiving sheave, and a supporting means mounted upon the top edge of said frame for said shafts and reel.

THE GALICIAN PETROLEUM INDUSTRY.

The conferences of the members of the Petrolea Co., which took place in Vienna toward the end of April, have led to one important result. It was resolved that the company shall not take up any more crude oil for sale from the producers, nor make any advances on the same after the 30th of June. The motive for this decision is the desire of the Petrolea Co. to make new agreements with the producers on modified terms. The all important question therefore at the moment is, will the producers agree to the new conditions, principal among which is one requiring them to give an undertaking to refund to the Petrolea Co. part of the advance made in the event of the price realised for the crude oil proving below the amount of the advance. The advances now made are at the rate of 25 francs per ton of crude oil. Should a considerable part of the producers controlling, say 20 to 25 per cent. of the total output of crude oil in Galicia, decline to accept the new terms, the further existence of the Petrolea Co. or of any crude oil sales organisation will become impossible, and in face of the existing over-production, a fall in price will be inevitable, a thing the refiners, who are likewise members of the Petrolea Co., seem to be aiming at. There is hope, however, that the majority of the producers will accept the new terms, provided they are given a fair representation on the committee which concludes the agreements. A scheme is said to be on foot to combine all the pipe line companies in Galicia into one concern, which will decline to pump the oil of firms outside the Petrolea Co., and thus force the majority of them into that company.

The negotiations between the Petrolea Co. and the refiners have not so far led to any satisfactory result. The provisional agreement signed by the refiners undertaking to buy first the crude oil required by them for the manufacture of kerosene for the home market, and only when this has been fully satisfied to buy crude for manufacturing export oils, turns out quite valueless, owing to the abstention of one refinery, the Berg refinery of Budapesth, which invalidates all the other signatures. The agreements of the Petrolea Co. with the producers on the one hand, and the refiners on the other, however, do not expire before the 30th April, 1907, so that there is still ample time to adjust the differences between the producers and refiners, and thus avert a crisis.

In the meantime the number of outsiders are increasing, and many of the newly-established producing firms at Tustanowice are keeping outside the Petrolea Co.

The production of crude oil in Galicia is increasing, as shewn by the following figures for the first three months of 1906, compared with the corresponding period of 1905 (in tons) :—

	1906	1905
January	60,130	53,861
February	55,222	55,625
March	65,793	59,274
	181,215	168,760

LATEST NEWS.

The latest issue of the German paper, *Petroleum*, contains the following interesting statistics relating to the Boryslaw-Tustanowice oil field. From this it appears that up to the 12th of March there were at Boryslaw 345 boreholes, of which 19 per cent. are old wells, definitely abandoned; 13 per cent. are temporarily inactive, whilst fishing or other similar operations are in progress; 8 per cent. are producing more than 20 tons each daily; 11 per cent. are producing less than 20 tons each daily; 6 per cent. are wells in which boring was suspended through insufficiency of oil; and 43 per cent. are wells in course of drilling.

The following are approximate figures of the output of crude oil at the Boryslaw-Tustanowice oil field in April:—

Boryslaw.—Potok: Hekla II., about 6,000 tons; Boryslaw Syndicate, 3,000 tons; Herschdörfer-Grymajlo, 2,500 tons; Lubomirska and Co., 2,000 tons; Galizische-Karpathen Gesellschaft, 1,800 tons; Phœnix, 500 tons; A.G. füer Naphtha Industrie, 150 tons; total, 15,950 tons—or, say, 16,000 tons.

Ulica Panska.—Klaudyusz, about 6,000 tons; Galicia, 2,000 tons; Dr. Freund, 1,800 tons; Dr. Fanto, 700 tons; Artur, 700 tons; Nadzieja, 500 tons; Zgoda, 500 tons; Bianka, 500 tons; Zuckerberg, 400 tons; Allsaider, 100 tons; Ural, 100 tons; total, 13,300—or, say, 13,500 tons.

Tustanowice.—Litwa, 3,500 tons; Urycz Co. (section I.), 2,000 tons; Laszcz, 1,200 tons; Sezan, 1,500 tons; Triumph, 1,200 tons; Ralph and Clay, 1,500 tons; Banzai, 1,400 tons; Ernestyna, 500 tons; Georg, 1,000 tons; Malczewski-Nahlik, 700 tons; Genia, 400 tons; Zazia, 400 tons; Salomon, 200 tons; Synge, 600 tons; Trunkwalter, 100 tons; Ressegnier, 1,300 tons; total, about 17,500 tons—or, say, 18,000 tons.

Thus the total output of crude oil in the Boryslaw district works out approximately as follows:—

Potok, 16,000 tons; Ulica Panska, 13,500 tons; Tustanowice, 17,500 tons; total, 47,000 tons.

The following table gives particulars of operations of the Petrolea Co. during March, 1906:—

	Boryslaw Oil. Tons.	Other Oils. Tons.	Total. Tons.
Stocks on 1st March	391,868	90,472	482,340
Add receipts in March	36,716	9,261	45,977
	428,584	99,733	528,317
Less quantities withdrawn by producers	15,058	2,221	17,279
Left for sale on commission ..	413,526	97,512	511,038
Deliveries on sales during the month	27,622	7,203	34,825
Stocks on 31st March	385,904	90,309	476,213

The following are the particular amounts realised by the sales in March:—

	Tons.		Kronen.
Oil sold as fuel	3,677	....	83,041
,, for export trade ..	17,211	....	345,708
,, ,, inland trade ..	13,936	....	684,057
Total	34,824	....	1,112,806

SOCIÉTÉ DE GROSNYI POUR L'INDUSTRIE DES PÉTROLES SOUS LA FIRME J. A. AKHVERDOFF & CO.

The directors' report and balance sheet of the above company for the year 1905, adopted at the general meeting of shareholders held at St. Petersburg on the 4th of May, shews assets and liabilities balance at 8,785,023 roubles. The company's properties, including lands and building, figure in the balance sheet at 4,051,978 roubles, being an increase of 12,612 roubles against the preceding year. In this figure petroliferous lands stand for 3,783,649 roubles, and buildings, etc., for 268,328 roubles.

The area of the company's oil properties remains unchanged, and consists of the following seven plots:—

Description of plot.	Area in acres.	Date of expiry of concession.	Rental per ann. Rs.	Royalty. Production.
Ermoloff plot ..	27	Feb. 22, 1928	1,500	50/60%
				Corec per pood.
Mamakaeff, No. 975 .	27	Jan. 1, 1920	1,500	2 1/60
Voiskovoi, No. 977 ..	54	,, 1, 1920	3,000	5 1/5
,, No. 22 ..	22·4	June 1, 1922	1,253·75	3·46
,, No. 23 ..	27	,, 1, 1922	1,500	3·46
,, No. 24 ..	27	,, 1, 1922	1,500	3·04
,, No. 25 ..	27	,, 1, 1922	1,500	3·03
Akhverdoff	54	Oct. 10, 1932	nil	nil
Kireeff	27·25	,, 10, 1932	nil	nil

The following was the condition of the wells on the various plots belonging to the company on the 1/14th of January, 1906.

On the Ermoloff plot there were altogether 12 boreholes, of which six were in exploitation, *i.e.*, producing, five were being drilled or deepened, and one was temporarily inactive.

On the Voiskovoi plot, No. 977, there were altogether 16 wells, of which nine were producing, one was in drilling, and six were temporarily inactive.

On the Voiskovoi plot, No. 22, there were five wells; three producing, and two in course of drilling or deepening.

On the Voiskovoi plot, No. 23, there are six wells; all producing.

On the Voiskovoi plot, No. 24, there are six wells; five producing, and one temporarily inactive.

On the Voiskovoi plot, No. 25, there are four wells; one producing, and three temporarily inactive.

On the Mamakaeff plot, No. 975, there are 14 wells; six producing, six in course of drilling or deepening, and two temporarily inactive.

Upon all the company's plots there were 63 wells of which 36 are producing, 14 are in course of drilling, and 13 temporarily inactive.

Materials, instruments, etc., figure on the balance sheet at 1,802,208 roubles, thus shewing a decrease during the year of 162,249 roubles.

The stock of oils, which stands at 419,777 roubles, shews a decrease during the year of 76,559 roubles, this being due to the greater ease with which the company was able to market its products.

The production of crude oil on the company's property in 1905 amounted to 21,352,100 poods, against 17,909,200 poods in 1904, *i.e.*, an increase of 3,442,900 poods.

The production for the first three months of 1906 amounted to 5,765,600 poods against 4,693,600 poods in the corresponding period of 1905. The production of the first quarter of 1906, month by month, was:—January 2,236,000 poods, February 1,121,300 poods, and March 2,408,300 poods.

The basis for the commercial operations of the company is an agreement between the company which is by far the largest producing firm in the Grosny oil fields and the Nouvelle Société Anonyme du Standard Russe, of Paris, which latter possesses the necessary installations and organisation for the distribution of Grosny oils, namely, a large refinery at Novorossisk, storage installations at Novorossisk and Odessa, etc.

The export of a considerble part of the company's output of oils by way of the Black Sea to foreign markets is assured by the extensive commercial relations which the Standard Russe possess in Europe.

Another considerable part of the company's production goes to the Vladicaucasian Railway Co. for treatment at their refinery with a view to producing residuals to be used as fuel for their locomotives.

By agreement with the Standard Russe Co., the company has continued during the year to buy up the crude oil produced by other Grosny firms, for the purpose of treating the same in the refineries at Grosny and Novorossisk, and also to purchase the products of other Grosny refineries for export purposes.

The total production of crude oil at the Grosny oil fields in 1905 amounted to 42,833,800 poods (701,617 tons), which was divided among the following 15 firms:—

	Poods.
Akhverdoff and Co.	21,352,100
Spies Petroleum Co., Ltd.	6,880,000
Anglo-Russian Maximoff Co., Ltd... ..	5,630,000
North-Caucasian Oil Fields, Ltd.	1,990,000
Kasbeck Syndicate, Ltd.	1,160,000
Standard Russe	1,045,000
J. MacGarvey	1,008,500
Tcheleken-Daghestan Co.	920,009
Grosny Oil Co...	780,000
Caspian and Black Sea Society	770,000
The Moscow Co.	570,000
St. Petersburg Co.	470,000
Kholodovsky	170,000
Spies, Stucken and Co.	77,000
Alkhan-Yourt Co.	11,200
Total	42,833,800

The sale of crude oil and products during the year realised 4,652,039 roubles, against 3,781,894 roubles in the preceding year. The total revenue, including sundry items, was 4,693,694 roubles, and the working expenses altogether amounted to 3,105,235 roubles.

The directors propose that this profit shall be applied in the following manner:—Depreciation, 572,632 roubles; Government tax, 90,178 roubles; statutory reserve fund, 50,791 roubles; first dividend of 5% on preference shares, 150,000 roubles; 10% of surplus as remuneration to directors and auditors, 72,485 roubles; second dividend on preference shares, 347,600 roubles; a dividend of 43·45 roubles per share on the ordinary shares, 304,150 roubles; and 621 roubles to be carried forward.

At the ordinary general meeting the report and accounts were adopted, and the directors' proposals as to distribution of profits agreed to.

Artificial Petroleum and the Products of Destructive Distillation.

In a recent issue of the *Neftiannoie Dielo*, Mr. Kharitchkoff deals with the question of the preparation of artificial petroleum. The experiments carried out by Mr. Rakusine, which were dealt with in the Review at the time, having established the radio activity of petroleum, more particularly of its higher fractions, the question arose as to the extent to which this property was present in the artificial petroleum obtained by the method of Sabbattier and Sanderens. This method consists in passing a mixture of acetylene and hydrogen through nickel filings, heated in a glass tube to 200° C. In the receiver a thick mass condenses, similar in appearance to petroleum, but in very small quantity.

Wishing to obtain this product for the purpose of experiments, Mr. Kharitchkoff repeated exactly the experiment of the above-mentioned chemists, but obtained a quite insufficient quantity of the product at a large expenditure of materials. The quantity of pure artificial petroleum obtained was quite insignificant. The experiment has further shewn that by raising the temperature to 300° C. a larger quantity of the product of the reaction is obtained, but it then possesses quite different properties. Its odour is pungent, resembling that of products of decomposition. Apart from the liquid which condenses in the receiver, there is also received a thick and non-volatile pitch. The specific gravity of this condensed product is 0·929 at 26° C.

The following are the detailed results of the experiments:—

There was used 76 litres (0·5 grammes) of hydrogen, and 25·2 litres (25·2 grammes) of acetylene. From this quantity he obtained two grammes of artificial petroleum and 7 grammes of semi-fluid pitch. Apart from this, there was formed much soot, in consequence of which there was a very heavy loss of acetylene. This naturally goes to prove the imperfect nature of the experiment.

On the basis of the above figures, we may calculate the cost of one pound of artificial petroleum, taking the cost of carbide at two roubles per pood, at about 75 copecs per pound.

The product of reaction obtained, *i.e.*, the artificial petroleum consists of a mixture of various hydrocarbons. This is confirmed by the following results of fractional distillation:—

Boiling Point 110° C.

		Per cent.	Spec. grav.
1st Fraction ..	.. up to 150° C.	5·0	0·825 at 25° C.
2nd ,, ..	.. 150 to 200° C.	14·5	0·837 ,, ,,
3rd ,, ..	.. 200 to 270° C.	29·25	0.867 ,, ,,
Residue	—	50·75	1·009 at 23° C.

The residue is a very thick liquid, resembling the goudron obtained in the lubricating oil refineries, both in colour, general appearance and odour.

An elementary analysis of this product yielded the following results:—

	Per cent.
Hydrogen	9·25
Carbon	88·47
Ashes	0·42
	98·14

The artificial petroleum produced by the method of Sabbattier and Sanderens evidently has the property of becoming rapidly oxidised. This is due to the presence in it of a large proportion of unsaturated hydrocarbons.

First Elementary Analysis.

Quantity of liquid used, 0·1226. Received: Carbonic acid, 0·3796; water, 11·24. Results: Hydrogen, 10·11 per cent.; carbon, 84·42 per cent.; total, 94·53 per cent.

Seocnd.

Quantity of liquid used, 0·473 gr.; water, 0·4,202; carbonic acid, 1·4242; hydrogen, 9·81 per cent.; carbon, 82·11 per cent.

Average result: Hydrogen, 9·96 per cent.; carbon, 83·27 per cent.; total, 93·23 per cent.

For an approximate determination of rotative capacity, Mr. Kharitchkoff used a Sacharimeter. The third fraction proved non-transparent for polarised light; of the first fraction there was not sufficient for an experiment. The second fraction was dissolved in three volumes of ether; was examined, but proved without any appreciable rotative capacity. The same properties were found also in the oil obtained by the refining of the residue by sulphuric acid. This oil represents a yellow very viscous liquid. The loss of this product in the refining process amounts to 80 per cent.

To establish the nature of the products obtained, or to be more exact, to ascertain their degree of unsaturated capacity, their iodine equivalent was determined by the Hubl method.

The products of the destructive distillation of petroleum possess a high iodine number, owing to the abundance of unsaturated compounds. Thus the iodine equivalent for the fraction of the products of destructive distillation between 200° and 270° C. is 126, whilst for the third fraction of the artificial petroleum it is nearly double. Therefore the analogy between the artificial petroleum and the products of destructive distillation is fairly complete. This analogy is found also in the high specific gravity of the fractions corresponding to kerosene.

This latter circumstance is very characteristic, and is of considerable scientific interest. It characterises the cathalitic action of the nickel, which at one temperature (200° C.) has sythetising and at a higher temperature a destructive effect. As the products of the decomposition in this case are more volatile, and therefore immediately separate themselves out of the sphere of action. Consequently in this case can be fully applied the general principles enunciated by Betholet about the course of chemical reactions.

The absence of any rotative capacity in this case cannot be taken as confirmation of the organic origins of petroleum, for even the decomposition of parts of hydrocarbon products are obtained which are simplified in their construction. A definite solution of this question will only be arrived at after the method of Sabbattier and Sanderens has been perfected in a manner to increase the yield of the product of the contact action.

THE RUSSIAN PETROLEUM AND LIQUID FUEL COMPANY, LIMITED.

GENERAL MANAGER'S REPORT.

In his report for the past year, the general manager of the Russian Petroleum and Liquid Fuel Co., Ltd., speaks at the outset of the abnormal difficulties encountered during the period under review, and, commenting upon the damage done to the company's property, says that out of a total of 58 wells on the property the derricks of 46 wells were utterly destroyed, the damage done to the plant and machinery inside the derricks varying from absolute loss to a possibility of partial repair.

Proceeding, he says: The above unfortunate occurrences could not do otherwise than have a very bad effect upon the year's results, and is immediately seen in the figures of production, which amounted to only 13,845,789 poods for 1905, as against 29,205,803 poods for the previous year. Besides the stoppage after August, another cause contributing to this serious drop in production was the former neglect of proper water shut-off, which we are now doing our best to remedy. We must refer to one cause which would in any case have tended to reduce our production in the present year, *i.e.*, neglect in former years as to boring to the lower strata. However much we may regret having to pass an upper stratum, already largely exploited, but which may still give a fair amount of oil, it is not good policy to yield to the temptation to maintain a present production at the expense of the future, and thereby to allow our competitors to tap the lower virgin oil beds, whilst we depend only on the higher strata. Our intention last year was to remedy this as much as possible by carrying our boring wells down with all speed to the deep levels, but the disorders and strikes so much curtailed the work that we were not able to fulfil all our programme. Thus five new wells, which were included in our estimates for 1905, were practically untouched at the end of the year.

We have recently received great encouragement from well 62, which has been yielding excellent results with periodical spouting at a depth of 309 sagenes, and gives great hopes of future success with other wells which we are now boring to this same deep stratum.

The total depth bored during the year has been 950½ sagenes (including plot 4), as against 2,770 sagenes in 1904. This falling off is of course accounted for by the practical cessation of all boring work after the riots and conflagration of August. Since then our attention was directed to clearing away the debris of burnt buildings and derricks and repairing engines, rigs and other machinery, and reinstating our damaged producing wells. Another great hindrance to the re-starting of boring work was the inability to replace our ruined machinery quickly, as all other producers were in similar need, and the engineering firms could not cope with the demand. It is only now that the boring work done in 1904 and the first half of 1905 is beginning to shew some results in the production.

Three new wells were started during the year, viz., Nos. 12, 13 and 14, and are being drilled by contractors. We have adopted the policy of giving out new wells to be drilled by contract, and the results so far have justified our action.

POWER.—Owing to the impossibility of adding to our boiler plant without encroaching on valuable boring land, some other method of adding to the power necessary for new work of boring and baling was essential. We have, therefore, decided to utilise electric power supplied by the Bibi-Eibat Electric Power Co. Ten baling wells are being fitted up on this plan, which, when completed, should considerably relieve the boiler plant and economise valuable ground for boring purposes.

AIR COMPRESSORS.—Two air compressors have been added to the plant during the year. These new compressors differ from the old belt-driven type in being direct steam driven, and are more economical in working. The compressor plant now consists of 15 air compressors capable of compressing about 4,500 cubic feet of free air per minute. During the fires of August one compressor house containing three compressors was burnt, but fortunately the damage was chiefly confined to the building, and the compressors were affected but slightly. Although the utility of compressed air is very evident where there is a good level of liquid to be raised from a well, yet in other cases where the level is low great caution is necessary.

DERRICKS.—The benefit of employing iron in the construction of the derrick sheds, under which is housed all the machinery necessary for working the well, was apparent during the great fire of August. Although the sheds themselves were destroyed, they afforded great protection to the engines, rigs and drums, so that many were able to be repaired. All new derricks have been covered with iron, and the sheds reconstructed of the same material.

After drawing attention to the general condition of the wells, Mr. Urquhart says:—With a heavy drop in the general production of naphtha, and with the consumption of mazout in the interior of Russia steadily increasing, it was natural that the price of naphtha should go up, and accordingly we find the price of naphtha constantly increased during the year, rising from 14 copecs in January to 27 copecs in October, *i.e.*, towards the close of navigation. After this the price commenced falling again, dropping to 20 copecs in November and 17 copecs in December, owing to the fact that after the close of navigation the buying of mazout temporarily ceases. As for kerosene, there has been no demand of any consequence from abroad throughout the year. Owing to this lull in the export business the prices of waggon kerosene shew a downward tendency, falling from 18¼ copecs in January to 14 copecs in March and April, slightly improving in May to 17 copecs, and going up to 20 copecs in June, with practically no business done. Regarding sea kerosene, which is principally supplied to Russia, the market was livelier. During the first four months prices went down from 16¾ copecs in January to 14¼ copecs in March, but afterwards prices steadily increased, and directly after the fires (September) some few sales were made at as much as 40 copecs per pood, going down to 28 copecs in November.

The general improvement of the Baku markets affected, of course, the prices in the interior of Russia. We are realising for our oil disposed of there about 18 copecs for mazout, and estimate, approximately, 30 copecs for kerosene, but final accounts in respect to kerosene are not yet to hand. The selling of our mazout during the year under record was for the last time done through the Eastern Co., and the distribution of our kerosene for the first time by Messrs. Nobel Bros. and Co. and the Mazout Co. In future both products will be disposed of through the medium of this combination, and competition on the Russian markets thereby being weakened, we feel certain of getting satisfactory results for our oil.

THE RUSSIAN PETROLEUM AND LIQUID FUEL COMPANY, LTD.

Dr. *BALANCE SHEET, January 13th (December 31st, 1905, o.s.), 1906.* Cr.

CAPITAL AND LIABILITIES.

		£ s. d.	£ s. d.
To Share Capital—Issued			1,100,000 0 0
,, Debenture Capital			292,800 0 0
,, Sundry Creditors and other Credit Balances—			
England		10,855 5 4	
Russia		180,544 11 11	
Debentures drawn but not presented		7,245 0 0	
Unclaimed Dividends and Interest		848 19 3	199,493 16 6
,, Bills Payable—Russia			287,199 10 11
,, Advances from London Bankers			136,560 0 0
,, Advance from Russian Government			17,637 10 0
,, Provision for Taxes in England and Russia—			
Balance per last Account ..		4,455 9 2	
Additional this Year		9,672 17 5	
		14,128 6 7	
Less Already paid		8,128 6 7	6,000 0 0
,, General Reserve Fund Account—			
Balance per last Account ..		100,000 0 0	
Add—Appropriated last year for Doubtful Debt, since received		15,000 0 0	
		115,000 0 0	
Less—Written off—			
Loss to Property	103 944 12 10		
Materials destroyed	7,814 19 3		
Clearing Property after Fire ..	16,900 10 9		
	128,660 2 10		
Less–Depreciation reserved ..	42,456 7 1	86,203 15 9	28,796 4 3
,, Preference Shareholders Reserve Fund—			
Balance per last Account ..		119,902 19 7	
Add—Interest, etc., received during the year		7,056 2 4	126,959 1 11
,, Profit and Loss Account—			
Balance		£15,566 16 8	
Less—Transferred to Depreciation Account		15,566 16 8	
,, Contingent Liability— Bills discounted	£369,846 2 1		
			£2,195,446 3 7

ASSETS.

	£ s. d.	£ s. d.
By Purchase of Property and Capital Expenditure— Balance per Account		1,483,526 2 3
,, Stocks—		
Naphtha, Kerosene, Mazout, Lubricating Oil, etc., taken at prices estimated to realise subsequent to December 31st, 1905, O/S		33,181 5 4
,, Oils delivered under Contracts .	259,921 0 6	
Less Advances received ..	126,248 1 0	133,672 19 6
,, Materials and Stores	117,184 13 10	
Less Destroyed by Fire ..	7,814 19 3	109,369 14 7
,, Debtors and other Debit Balances—		
England	3,622 15 8	
Russia	135,934 10 3	
	139,557 5 11	
Less Reserve for Bad and Doubtful Debts.. ..	34,341 19 2	105,215 6 9
,, Bills Receivable – Russia ..		37,346 2 8
,, Expenses paid in Advance— Rent, Insurance, Freight on Stocks of Oil, etc.		13,772 9 1
,, Investments and Securities Abroad at cost or under ..		81,614 0 3
,, Excise Bonds and Permissions .		17,000 17 10
,, Discount on Debentures Issued (Balance)		6,074 11 1
,, Preference Shareholders' Reserve Fund Investment Account, Investments at Cost ..		126,959 1 11
,, Cash—		
England	25,469 2 10	
Russia	22,244 9 6	47,713 12 4
		£2,195,446 3 7

Dr. *PROFIT AND LOSS ACCOUNT for the Twelve Months ended 13th Jan. (Dec. 31st, 1905, o/s.), 1906.* Cr.

	£ s. d.
To Expenses in London (Directors' Fees, £4,171 14s. 11d.)	11,428 19 6
,, Interest on Advances, £11,705 1s. 4d.; Premium on Debentures Redeemed, £1,860; Discount on Debentures — amount written off, £867 15s. 10d.; Interest on Debentures, £18,126 17s. 1d.; Second Debenture Issue—printing and stamping expenses, £398 16s.; Difference in Exchange, £1,437 19s. 3d.; Provision for Taxes in England and Russia, £9,672 17s. 5d.	55,498 6 5
,, Balance transferred to Depreciation Account ..	15,566 16 8
	£71,065 3 1

	£ s. d.
By Gross Profit on Trading	26,889 4 5
,, Transfer Fees, etc.	171 15 0
	27,060 19 5
,, Amount brought forward from last year ..	44,004 3 8
	£71,065 3 1

In accordance with the provisions of the Companies Act, 1900, we certify that all our requirements as Auditors have been complied with. We report to the shareholders that we have examined this Balance Sheet and Profit and Loss Account, which we find are prepared in accordance with the Books and Accounts kept in London, and with the Accounts received from Baku, certified by Messrs. McAuliffe, Davis and Hope, Chartered Accountants, and, subject to the value of the investments and securities abroad, we are of opinion that the balance sheet is properly drawn up so as to exhibit a true and correct view of the state of the company's affairs as shewn by the books of the company.

TURQUAND, YOUNGS & CO.,
Chartered Accountants, } *Auditors.*

41, Coleman Street, London, E.C.,
17th May, 1906.

MISCELLANEA.

AMERICA'S EXPORTS OF PARAFFIN WAX.

The exports of paraffin wax from America during March and during the corresponding period of last year were as under (in pounds):—

Exported to—	1905.	1906.
United Kingdom	9,768,839	10,935,013
Belgium	198,990	34,190
France	13,820	26,219
Germany	763,689	622,466
Italy .. .. :	598,960	1,904,927
Netherlands	806,771	439,392
Other European Countries ..	663,555	703,338
British North America	9,863	—
Central America and Brit. Honduras	76,850	70,438
Mexico	510,422	1,288,929
West Indies and Bermuda ..	3,834	2,247
Brazil	9,725	11,298
Chili	—	—
Other South American Countries ..	28,000	34,000
Japan	826,048	1,675,664
British Australasia	581,971	496,738
Other Asia and Oceanica	11,077	16,295
British Africa	180,065	119,761
Other African Countries	—	24,140
Total, pounds ..	15,052,479	18,405,055

THE PETROLEUM DEPOSITS OF ASIA MINOR.

The Turkish Government is now investigating the extensive petroleum deposits known to exist in the eastern part of Asia Minor. Zekki Pasha, commander of the fourth army corps, has been granted a concession for exploiting the oil field at Terchan in the villayet of Erzerum. The total import of petroleum into this province last year amounted to 170,000 gallons almost exclusively from Russia, with the only exception of 1,300 gallons which came from Roumania.

THE EXPLOITATION OF ROUMANIAN PETROLEUM LANDS.

NEW COMPANY TO BE FORMED.

Mr. Anton Raky, apart from his interests of the Campina-Moreni Co., of which he is the general manager, is preparing to form a new company for the exploitation of Roumanian petroleum lands, with a capital of 15,000,000 francs, to be subscribed in Germany and France.

Mr. Raky has lately taken up vast concessions of petroliferous land, which will be handed over by him to the new company, and the programme of operations is to be very extensive. He proposes to erect works in Roumania for the manufacture of boring materials for use by the various companies in which he is interested. Mr. Raky, who is the general manager of the International Bohrgesellschaft, of Erkeleuz, Germany, has been doing a great deal in exploring for coal in Germany. Now that prospecting for coal has been stopped in Germany by law for five years, Mr. Raky has a number of boring outfits and a large technical staff thrown idle. He proposes to transport to Roumania within the shortest time possible 30 complete boring rigs and about 1,000 workmen. He has already acquired numerous plots of land at Campina, where he has started to build houses for offices and workmen's dwellings, apart from the building which he is erecting on the oil fields. Mr. Raky intends also to build two local railway lines in the district where his properties are situated.

DOES PETROLEUM EXIST IN EGYPT?

In a report on the mining industry of Egypt for the year 1905, by Mr. J. Wells, annexed to Lord Cromer's report, it is stated that on the Red Sea littoral, in the neighbourhood of Jebel Zeit, petroleum undoubtedly exists, but whether in commercial quantities or not is at present undecided. The concession lately held over the above area has been abandoned, but negotiations are being conducted with a view to granting other applicants the right to conduct boring operations in the neighbourhood. Another application has been received for the right to explore for coal any unleased lands, and with a view to giving facilities for those wishing to prospect, a new form of prospecting licence has been drafted for all unleased lands throughout Egypt. The general terms of this licence are: a yearly fee of £E 25 per licence, which will permit the licensee to take up a prospecting area of 25 square miles, and should coal or oil be found, the right to apply for and receive a concession not exceeding 10,000 acres for coal, and 5,000 for oil at a yearly rental per acre of P.T. 12½ with a royalty of P.T. 2½ per ton of coal, P.T. 2½ per 100 gallons of crude oil, and P.T. 15 per ton on mineral waxes or other substances included in the licence.

At the conclusion of his report, Mr. Wells says that the economic conditions existing are good, and expresses his opinion that the extent and distribution of the various mineral belts in Egypt are such as to warrant the expenditure of capital in their development.

PROSPECTING FOR OIL IN ARIZONA.

The *Globe Register* of Arizona gives an account of the work being done by the company now engaged in drilling at Indian Hot Springs, near Fort Thomas in Arizona.

The *Register* points out that before the company was formed, the ground, the Hot Springs property, consisting of about 360 acres, of which Messrs. John and Andy Alexander are the owners, was thoroughly examined by Mr. A. C. Zeirath, who for many years was actively engaged as an oil expert, and pronounced by him to be of oil-producing character. Upon his report the company was formed and Mr. Zeirath was despatched to Los Angeles and other points to purchase the machinery necessary to sink to almost any depth that might be desired. Considerable delay was experienced in getting the machinery to the springs on account of railroad delays and by high water in the Gila River. But finally it was got in place, and with an 80-foot derrick operations were commenced, and a few days ago the drill was down 300 feet, and was passing through a thick formation of shales, which rock is always found overlying oil deposits.

THE BURMAH OIL COMPANY, LIMITED.

ANNUAL MEETING.

The fourth annual meeting of the Burmah Oil Co., Ltd., was held recently at Glasgow, Mr. John T. Cargill, the chairman, presiding over a large attendance of shareholders.

The Chairman, in moving the adoption of the report, said that at the last annual meeting he referred to the action of the importers of foreign oils into India, which had forced down the price of kerosene oil to an unnecessarily low level, and he pointed to the fact that a continuance of this aggressive competition on their part would undoubtedly result in a reduction of the company's profits. The war in prices unfortunately went on with increasing severity until the month of October, when an arrangement was come to with the Asiatic Petroleum Co., Ltd., under which the price of kerosene oil in India was gradually raised once more to a satisfactory level. The rise in price, however, began too late in the year to materially benefit the accounts under review, and the result was that the gross profits, including the balance carried forward, only amounted to £324,653 8s., as against £389,127 11s. 10d. for 1904, but under all the circumstances the directors considered that this was a very satisfactory result. No doubt it would be a considerable disappointment to the ordinary shareholders to have to be content with a 10 per cent. instead of a 15 per cent. dividend, but any war meant losses more or less severe to all the belligerents. In a business like the oil business, which was liable to outbreaks of violent and what often looked like unreasoning competition, it was essential, if it possibly could be done, to strengthen one's position by building up a strong reserve, and the directors felt confident that their proposal to place £50,000 to the general reserve fund would meet with the hearty approval of the shareholders. This fund would then stand at £240,000, and with £80,000 at the credit of the capital reserve fund, £60,000 at insurance fund, £22,902 8s. 7d. at marine insurance funds, £135,805 at share premium account, and £40,000 at redemption of debenture stock account, the directors felt sure that the shareholders and debenture stockholders would recognise that they were working with a view to placing the company on as strong and stable a basis as they possibly could. The directors felt confident that along with the feeling of disappointment at the curtailment of the profits owing to the war, the shareholders would have a keen sense of satisfaction that under the arrangement they came to with the Asiatic Petroleum Co. the directors gained for the Burmah Oil Co. what they had taken their stand for all along—namely, the recognition that, as the local producers, the Burmah Oil Co. had the first right to the Indian market, and that their policy of developing the Burmah oil fields and the Burmah oil industry must be in no way hampered or curtailed. In pursuance of that policy prospecting and boring operations were undertaken on a much more extensive scale, and with a very much larger staff during 1905 than in any previous year, with a consequently largely increased expenditure in the oil fields. Unfortunately, a large amount of the prospecting work undertaken in new districts which seemed to hold out fair hopes of oil bearing only went to prove that oil was not to be found in paying quantities in these districts, and work had been abandoned and the expenditure had been written off in this year's accounts. Against these disappointments the directors had to chronicle the most satisfactory results in the history of the company in the development work of their older properties, where a large area of hitherto untested land had been proved to be rich in oil. In August last they struck in the Khodoung field their most prolific gusher, which started flowing at the rate of 14,000 barrels, over half-a-million gallons per 24 hours, and it was now giving, under proper control, over 2,000 barrels regularly per day. After protracted negotiations, the directors towards the end of last year entered into a contract with the Admiralty for the manufacture and supplying of oil fuel to the British Navy. The works were well in hand, and should be completed towards the end of the present year. The Concessions Syndicate, Ltd., had met with many difficulties in getting to work in Persia, but all the plant and a full staff of drillers were now on the spot, and drilling should be well under way ere long. He had had the pleasure of taking a trip to India and Burmah towards the end of last year, and visiting the company's properties and principal agencies. He was extremely gratified with what he saw on his tour of inspection, and he could congratulate the shareholders on the great value and complete equipment and organisation of the company's properties and business. As to the prospects of the current year, he could tell them that so far they had done well. They were at present enjoying the blessings of peace in the oil trade in India. They had only completed four months out of the twelve, but these four had been good months. If peace continued, and they hoped it would, they would do well.

The report was unanimously adopted.

THE SAN FRANCISCO DISASTER AND THE CALIFORNIAN PETROLEUM INDUSTRY.

As we annonnced some weeks ago, little or no damage has been done to the oil industry of California consequent upon the terrible disaster which visited that district last month. Mr. Holland S. Reavis, of the *Oil Investors' Journal*, gives a number of details concerning the disaster in a special supplement to the current issue of the *Oil Investors' Journal*. In reviewing the losses the writer says that, aside from the loss of business, the companies handling fuel and refined oil in San Francisco sustained very little damage. Their offices in the down town district were destroyed, but as their plants and stations were located in the outlying sections they got off lightly, in most instances, with a few cracks from the earthquake. The only station of any size destroyed was that of the Associated Oil Co. on the North Beach. Steel tankage, buildings and loading facilities were all burned.

The Standard Oil Co.'s offices on the seventh floor of the Rialto building at Mission and New Montgomery streets were burned out, and temporary quarters were secured in the Union Savings building at Oakland.

The Pacific Coast Oil Co.'s refinery at Point Richmond has never stopped operating. The only damage from the earthquake was to the masonry. The shocks were felt as far south as Mendota, a point on the pipe line 200 miles south of San Francisco. Not even a tremour was reported from Bakersfield, where the line starts, 280 miles south. Some of the company's steel tanks located along the line near the northern terminus threw out some of their oil from the shaking they got, but none collapsed. The company's offices, occupying two-thirds of the sixth floor of the Rialto building in San Francisco, were burned out, and all records destroyed.

The offices of the Union Oil Co. and Union Steamship Co. in the Mills building were likewise burned out. The Union Oil Co.'s station on the bay front adjoining the Union Iron Works was not damaged, excepting for a few cracks in the walls. Fuel oil and refined oil are being delivered from this station as usual. Steel is on the ground for a 37,000 barrel tank. One 7,300 barrel and two 1,000 barrel steel tanks constitute the present storage capacity at this station. The location of the Union Oil Co.'s station is the site of the old Arctic Oil Co.'s plant.

The Union Oil Co 's refinery at Oleum, east of San Francisco, was not damaged by the earthquake. Extensive additions are being made to this plant, and it is expected that it will soon have a capacity of 20,000 barrels daily.

It is a matter for congratulation that the petroleum industry got off so lightly out of the most terrible disaster experienced for many years in any part of the world.

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{11}{16}$-$\frac{13}{16}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	3/6-4/0
,, ,, ..	£650,000 5½% Pref.	£1	7/3-7/9
Bibi-Eybat Petroleum Co. ..			10/6-11/6
Californian Oilfields	£250,000 Ord.	£1	5¼-5½
European Petroleum.. ..	£550,000 Pref.	£1	2/6-3/6
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	85-90
Russian Pet. & Liquid Fuel ..	£500,000 6½% Pref.	£1	13/0-14/0
,, ,, ...	£600,000 Ord.	£1	12/6-13/6
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	3¾-4
,, ,, ...	£575,000 Ord.	£1	9/6-10/6
Shell Transport & Trading ..	£2,000,000	£1	29/0-30/0
,, ,, ,, ..	£1,000,000 Pref.	£10	9¼-9½
Spies Petroleum Company ..	£312,500	10s.	8/0-8/6

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on May 22nd. Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	640	645
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	4,100	4,200
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	150	155
Neft Co.	250	—	—
Nobel Bros.	5,000	9,100	9,200
,, ,, ...	250	—	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

SCOTCH COMPANIES.

Supplied by Messrs. Maclean and Henderson, Stirling.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. 8½ pd	£199,750	£10	18¼
Do. 6% Cum. Pref. ..	£100,000	£10	12⅝
Burmah Oil, Ord.	£1,100,000	£1	53s. 9d.
Do. Pref.	£250 000	£1	25s. 6d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	8¼
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	19¾
Do. New (£8 10s. pd.)	£131,750	£10	18
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	87s. 6d.
Do. 6% Cum. Pref.	£100,000	£10	$12\frac{15}{16}$
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	30
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	67s. 6d.
Do. "B" Deb...	£150,000	£100	152¼

DUTCH COMPANIES.

Company.	Quotations May 15th.	Quotations May 8th.	Florins.
Arnhemsche Petroleum Mij. ..	77	80	1,000
Aurora ,, ,, (Deb. 5%)	90¾	90¾	—
Campina Poiana Mij...	35	35	—
Dordtsche Petroleum Mij. (Pref.) ..	126	122	500
,, ,, ,, (Deb. 4½%)	102¾	102¾	1,000
Elzasser Petroleum Mij.	$2\frac{7}{16}$	2¼	1,000
Gaboes ,, ,, ...	19¾	19¾	—
Holl. Rumeensche Petroleum Mij...	32½-33½	26-28½	1,000
Int. Rum. Pet. Mij.	88⅜	88¾	500
Java Petroleum Mij. (Ord.) ..	30	30	1,000
,, ,, ,, (Pref.) ..	42	42¾	—
Koninklyke Nederl. Pet. Mij. Shares	479½-481½	480-487	250-1,000
,, ,, Share certificates	480	478-482	1,000
Mœara Enim Petroleum Mij. ..	115	114½-115	100
,, ,, 1-1,000 Oblig. 5	102	102	250-1,000
"Moesi Ilir" Petroleum Mij. ..	34⅝	34⅞	—
Nederl.-Rumeensche Petroleum Mij.	17	17½	—
Nieuwe Ned. Petroleum Mij. And...	55¼	55¼	1,000
Oliebronnen in Hannover Mij. ..	173	170	—
,, ,, (Deb. 5 %)	100½	100½	—
Panolan Maatschappij Cert. ..	340	340	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	123¾	143⅞	1,000
,, ,, (Common) ..	99¼	97 x.d.	—
Sumatra-Palembang Petroleum Mij	62	61	500
Zuid Perlak Petrol. Mij. (Pref.) ..	88¼	84½	—

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 24th May, 1906, as follows:—

Since our last report of 10th inst., tin was rushed up in the early part of last week to the record price of £215 per ton for cash, but a day or two later there was a sensational collapse of £21 per ton to £194, owing to persistent bear selling, and since then the market has naturally been unsettled and subject to violent fluctuations. There has, however, been a recovery from the lowest point touched, and the closing price for cash tin to-day was £191. The tin plate market is paralysed by the continued uncertainty as to the price of tin, and the trade is still in a most unsatisfactory condition. Prices of oil sizes, following the drop in tin, are somewhat easier, and, as near as we are able to fix them, are as under:—

IC	18¾ × 14	124 sheets	110 lbs.	13/9 per box.
IC	19¼ × 14	120 ,,	110 ,,	13/9 ,,
IC	20 × 10	225 ,,	156 ,,	19/3 ,,

F.o.b. Wales. Tin lining and iron hooping extra.

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Crude Oil Prices in Roumania.—The price of crude oil in Roumania remains unchanged. There are no actual deals, as the whole output has been sold in advance. Great activity prevails at all the fields, and boring operations are proceeding at an accelerated rate. The boom in oil lands continues and deals are growing more numerous every day. Lately a number of transactions have taken place in land in the Dambovitza and Buzau districts.

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PETROLEUM REVIEW,
45, St. Mary Axe, LONDON, E.C.
American Office: 150, Nassau Street, New York.

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SATURDAY, MAY 26TH, 1906.

THE RUSSIAN PETROLEUM AND LIQUID FUEL COMPANY'S BALANCE SHEET.

THOUGH the annual report of the directors of the Russian Petroleum and Liquid Fuel Co., which is to be submitted to next Tuesday's meeting of shareholders, is far from what might be desired, there is no doubt that it will occasion but little disappointment among those directly interested—inasmuch as they have been forwarned as to what, under the present management, was inevitable. Even to look upon the operations and the management of this unfortunate concern in their most favourable light, they suggest to every thinking person that for a long time past things have not been going as they should, and the present report, which shews that for the first time in the company's history the preference shareholders have to waive their claims for dividend, and that the concern has been operated at an enormous loss during the past year, will, we should imagine, be productive of a very lively meeting next week.

Turning first to the balance sheet, which we publish upon another page of this issue, not a few items demand explanations from the directorate. The year's trading yielded a gross profit of about £26,000, but against this, the administration, debenture and other charges absorbed over £55,000, so that the net outcome of the year was a loss of practically £30,000. Of the total disbursements, the interest on debentures takes £18,000, the interest on advances accounts for £11,700, and the substantial sum of £11,428 goes to the payment of office expenses in London. This latter item may be sub-divided into directors' fees, £4,171; secretary's and clerks' salaries and office rent, £2,679; and general office expenses, £1,612; these, with the exception of law charges of £1,803 being the chief items under the heading of London expenses. One might well wonder why there has been such an enormous increase in salaries and general office expenses for the period under review, for in 1904 these two items figured in the profit and loss account at £1,467 and £885 respectively. Thus here alone there has been an increase of nearly £2,000 during the year, or roughly about 80 per cent., and so the significance of the contention put forward a few months ago for the practising of more economy in the way of administration is fully justified. We do not deny that some statement will be forthcoming upon this point, but to our mind, the main question is whether such unnecessary extravagence ought to have been allowed.

A few other items which go to prove the deplorable state of affairs generally in connection with the company include an increase in interest on advances of over £3,000, and an increase upon debenture interest of £4,000; while for the provision of taxes in England and Russia almost £3,000 less has now been set aside than was the case last year. The depreciation account and general reserve, however, offer the directors a slight loophole for smoothing over one ugly side of the company's position, and to the former account it is proposed to transfer £15,566—an amount ridiculously inadequate, and scarcely equal to 20 per cent. of the sum placed to the same fund for the preceding twelve months, while in the case of the reserve fund, it has been decreased by over £86,000.

Glancing now through the report of the general manager, there is much that calls for comment. Mr. Urquhart, at the outset, tries to justify his position by accounting for the great decrease in the production of crude oil, and after laying due stress upon the unfortunate riots, of which we have heard go much, he proceeds:—

> "Another cause contributing to this serious drop in production was the former neglect of proper water shut off, which we are now doing our best to remedy."

Everyone will admit that in the absence of a proper system of water shut off, the production of oil wells is a very uncertain factor, and consequently efforts directed toward securing this must be appreciated as a movement in the right direction, but we can scarcely reconcile Mr. Urquhart's statement with that made by the chairman of the company some few years ago when he went specially out of his way to congratulate the old management that it had surmounted that difficulty. But let us see if we can account in a practical way for the lamentable decrease in the company's production last year.

Taking the year all round and comparing it with 1904, the company's output dwindled down by over 53 per cent. We shall not contend that the riots and general disorders in August had no serious effect upon the production, for such a contention would be idle, but what we do say is that another cause must be looked to in the case of the Russian Petroleum Co. Taking the producers in the immediate vicinity of the company's plots, their decrease throughout the whole year works out at 28 per cent., as against this company's 53 per cent., and thus the whole of the blame cannot be laid upon the inter-racial disturbances as is suggested. Now we come to the activity in boring operations during the year. Here again, we are told, the falling off in the total depth bored (that is from 2,770 sagens in 1904 to 950 in 1905) is "accounted for by the practical cessation of all boring work after the riots and conflagrations in August," but it occurs to us that this is attempting to "beat about the bush" rather than to admit actual facts. Anyhow, if Mr. Urquhart's statement as to cessation of work from August be admitted as truth, then how does it come about that the preceding eight months only saw the drilling of 950 sagens when for the corresponding period of 1904 over 1,800 sagens were bored? It is only fair to the shareholders that they should be made conversant with facts, and not have arguments placed before them which cannot stand reasonable criticism.

There are numerous other points raised in the report which we view as being at the best nothing more than gross exaggerations, and the least that the shareholders ought to expect of their directors is that if amateurish blunders have been made in the past—the recent past—a spirit of manliness should prompt their making a clean breast of the whole matter.

LONDON OIL SHARE MARKET.

Friday, May 25th.

Although the position of the Stock Markets has materially improved during the past fortnight—the money market being easier, political clouds dispersing, and general trade indications warranting an all round advance—fresh business is conspicuous by its absence, and all departments remain stagnant. The close proximity of the End May Settlement, which embraces the exceptionally long period of 20 days, and the Whitsuntide Holidays promises no speedy improvement, but when once these drawbacks are relegated to the past, it is generally anticipated that a decided movement towards a higher range of value will take place. Fluctuations in Oil Shares have been few, but at one time Russian Ordinary were in great request rising to 14s. 6d. to 15s. 6d. Unfortunately the reaction was very swift and prices fell away again till on balance there is no alteration at 12s. to 13s., although the Preference Shares have remained 1s. better at 13s. to 14s. Shell Transport Ordinary has also gained 1s. at 27s. 6d. to 38s. 6d., and Spies are 6d. better at 9s. to 10s.; so that on the whole, the tendency is better, although Baku Ordinary are an exception, having lost 6d. at 3s. 6d to 4s.

For a *resumé* of actual movements we quote prices for Saturday, May 12th, in full, as follows:—Anglo-Russians $\frac{1}{16}$-$\frac{1}{8}$, Assam Oil, $\frac{5}{8}$-$\frac{7}{8}$, Baku Ordinary 4s. to 4s. 6d., Preference 7s. to 8s., Bibi-Eybats $\frac{7}{16}$-$\frac{9}{16}$, Debentures, 86-91, Californian Oilfields $5\frac{1}{4}$-$5\frac{3}{4}$, Refineries $\frac{1}{8}$-$\frac{3}{8}$, European Preference $\frac{1}{8}$-$\frac{1}{4}$, Preference 85-90, Russian Ordinary 12s. to 13s., Preference 12s. to 13s., Debentures 89-92, Schibaieff Ordinary 8s. 6d. to 9s. 6d., Preference $3\frac{5}{8}$-$3\frac{7}{8}$, Shell Transport Ordinary 26s. 6d. to 27s. 6d., Preference $9\frac{1}{4}$-$9\frac{3}{4}$, and Spies $\frac{3}{8}$-$\frac{7}{16}$.

On the following Tuesday Russian Ordinary and Preference both rose 1s. at 13s. to 14s., and on Wednesday Schibaieff Ordinary advanced 6d. to 9s. to 10s. On Friday Russian Ordinary were carried up to 14s. 6d. to 15s. 6d; but by Monday the price fell away again to 12s. to 13s. and Baku Ordinary were also flat at 3s. 6d. to 4s. With Wednesday some buying put the price of Shell Transport Ordinary up to 27s. to 28s. 6d., but other issues remain unaltered.

RUSSIAN AND ROUMANIAN NOTES.

Bustenari Oil Strike.—Well No. 2 belonging to Mr. L. Catargi, and situated at Bustenari, has struck oil.

Is it another Spouter?—A well of the Steaua Romana, sunk at Croitoru, close to well No. 79 of the Telega Oil Co., Ltd. has struck oil and produced considerable eruptions.

From Berca.—According to a report from Roumania, operations at Berca seem to have come to a complete standstill, and all the wells of the New Berca Petroleum Co., Ltd., are now inactive.

Distillate for Buenos Ayres.—The Aurora Co. has concluded a contract for the supply of two cargoes each of 3,000 tons of Roumanian destillate for Buenos Ayres and the River Plate.

The Romano-American Co.—The general meeting of shareholders of the Romano-American Co. was held at Bucarest on the 22nd of May. The only proposal before the meeting, *i.e.*, to increase the capital by 5,000,000 francs, bringing it up to 12,500,000 francs, was adopted.

Government Revenue.—The revenue derived by the Roumanian Government from the tax on petroleum during the financial year, ended March 31st, 1906, amounted to 2,730,792 francs, an increase of 178,493 francs against the preceding financial year, and 302,792 francs in excess of the budget estimate.

The Telega Oil Co.—A meeting of shareholders of the Telega Oil Co., Ltd., is to take place on the 31st of May, in London, at Cannon Street Hotel, to consider the directors' report and accounts for the last two and a-half years, and to pass resolutions to reduce the capital and transform the company into a Roumanian company.

The Batoum Pipe Line has again stopped working, and the exporters are placed in a difficulty, being unable to load the steamers due for cargoes. In view of the uncertainty as to when the pipe line will restart working, they decline to loan kerosene to one another, and where possible the dates for the arrival steamers are put off. About a million poods of kerosene has been stopped on the way. Spot kerosene is quoted at Batoum at 51 copecs, which is out of accord with the prices at Baku. The small case-making shops are without kerosene for filling their cases.

Fuel Contracts.—The contract for the supply of liquid fuel to the Samara-Zlatoust railway for the 12 months to end May, 1907, to the extent of 6,600,000 poods has been given out by tender in Samara. Of this quantity, 4,600,000 poods, to be delivered at Ufa, was secured by Nobel Bros. at 42½ copecs per pood; 1,000,000 pools for delivery at Samara was obtained by the Mazout Co. at 36¼ copecs per pood, and 1,000,000 poods delivery also at Samara was secured by the Eastern Transport Co. at 36½ copecs per pood. The contract for the supply of 5,500,000 poods of residuals to the Nicolaeff railway for the year to end of June 1907, was secured by the Mazout Co. at 39½ copecs delivered at Nijni-Novgorod.

The Coming Auctions.—It is now officially announced that the auctions for leasing out fresh Government plots for exploitation will take place next October. The plots to be leased include nine plots at Bebe-Aibat, one at Balakhany, eight at Saboontchi, and seven at Ramany. Surprise is expressed in petroleum circles at the omission to include plots on the recently drained Ramany Lake. The only reason given by the authorities is that the bottom of the lake is not sufficiently dry to render the demarcation of the plots possible is not considered sufficient. The bottom is not impassable now, and will be quite dry before the summer is over. It is proposed to make representations to the Government on the subject.

The Effect of the Duty on Bye-Products.—The introduction of the excise duty on lubricating oils and bye-products of petroleum is already having its effect on their use. From Czaritzan it is reported that after the coming in force of this duty the demand and prices for such oils have substantially declined. Those firms, such as the Neft Co., who had a stock of such oils, are suffering heavy losses. The Neft Co. has themselves bought their machine oil at Baku at 78 copecs. After deducting from the Czaritzan price of 1 rouble 40 copecs, the freight, excise duty, leakage, etc., we find that they lose more than 10 copecs per pood. Solar oil at a nominal price of 1 rouble 20 copecs has no demand at all, and former consumers are replacing at by other products.

THE UTILISATION OF NATURAL GAS AT THE BAKU OIL FIELDS.

Oil field engineers have long been searching for means of obtaining a new motive power for working the boring and pumping machinery at the Baku oil fields. Experience has shewn that steam engines involve an enormous consumption of oil, amounting in some cases to 20 per cent. of the oil extracted. Quite recently the larger firms have replaced steam by electric power, and one firm—the Baku Naphtha Co.—has commenced to use natural gas as fuel at the wells.

The existence of natural gas on the Apscheron peninsula has long been known, but for many years its utilisation was confined to its use by the local peasants for burning lime, for which purpose they obtained the gas by digging shallow pits. Recently, however, this very valuable material has received a more extensive application as fuel for firing the boilers at the wells of the before-mentioned company, who are now developing the gas deposit on the plot of land at Surakhany, formerly the site of the Kokoreff works, and by means of boreholes they obtained gas at a small depth. Experiments have shewn that the daily output of the first two wells amounted to 3,200,000 cubic feet. The temperature is 15° C, and the pressure 760 mm. The natural pressure of the gas in the wells did not exceed 4½ atmospheres, but with the aid of a regulating valve this pressure was increased to 9½ atmospheres. Under this pressure the gas is carried in pipes to the company's oil wells, where it is used for firing the boilers. The gas is introduced into the circular tubes of the latter by means of small pipes, with openings at the end, at a pressure of 3½ atmospheres. The above-mentioned quantity of gas replaces in the furnaces about 1,600 to 1,700 poods of crude oil, which means that a pound of oil, used as fuel, is equal to 50 to 55 cubic feet of natural gas used for the same purpose. At the present moment, gas is the only fuel used at the wells of the Baku Naphtha Co., and there displaces about 13,500 to 14,000 cubic feet of crude oil.

The above calculation refers to the beginning of the exploitation of the deposit, which has not yet shewn the least signs of exhaustion. On the other hand, one of the wells produced a spouter from a depth of 679 feet, which for ten and a-half months was throwing out enormous quantities of gas. This circumstance, taken together with the existence in the locality of numerous natural and artificial gas emanations and the undoubted existence of a connection between the oil and gas deposits, lead to the conclusion that the Apscheron peninsula contains large stores of natural gas, which could find a very wide application and could become of great value to the owners of the land and also to the State.

In view of the close proximity to the gas deposits of such a large centre of population as the town of Baku, it may be hoped that the use of this natural gas as an illuminant will be attended with great success. Baku is situated in a locality devoid of forests, and gas could therefore find extensive use among the people. Of greater importance, however, would be the adoption of natural gas as fuel at the oil fields and refineries, which would result in preserving an equivalent quantity of crude oil now used as fuel, which could then be put to more advantageous use.

COMBINE OF JAPANESE PETROLEUM PRODUCERS.

The *Tzinglauer Neueste Nachrichten* publishes the following particulars concerning a combine of Japanese petroleum producers. The capitalists owning the petroleum wells in Formosa, Hokkaido, and in the district of Aomori have combined themselves into a syndicate under the title of Namboku Sekiyu Kaisha (translated South and North Petroleum Co.), with a capital of 1,300,000 yen. The shares of this new concern will be put on the market. Of the oil fields of these three regions those in Formosa are the most developed. There are three boreholes, which at first yielded about 800 gallons each daily; gradually the yield declined, and now a well yields at the most about 200 gallons daily. Two more boreholes are about to be put in operation. The greatest obstacle in the development of this field hitherto has been the want of fuel for the boilers, and nearly half of the crude oil produced had to be burnt as fuel. Now, however, natural gas has been discovered in the neighbourhood of the wells, and it is proposed to utlise this as fuel at the oil wells. The price of petroleum in Formosa is double that in Japan, and it is calculated that the capital invested in the oil fields there will yield 20 per cent.

The oil fields in Hokkaido, on the other hand, only began to be explored in recent years. Two or three promising oil deposits were discovered there. The means of transport are, however, very restricted, and there are no roads at all. The oil wells which are now being worked belonged formerly to a Japanese of the name of Okura. The trial boring has shewn that the oil can be reached at a comparatively slight depth. It is proposed now to start 30 boreholes. The production is estimated at 30 koku (1,200 gallons) per day, which is considered sufficient to cover all working expenses.

The most promising oil field, however, is the one in the Aomori district. This oil field was likewise discovered in recent years, and began to produce oil only last August, when oil in large quantities was struck. Development operations have been suspended while a large oil storage tank is being constructed.

◆

The Tender of the Trinidad Lake Asphalt Paving Company, Ltd., has been accepted for street pavings work in the Metropolitan borough of Lambeth.

ANOTHER SUCCESSFUL YEAR FOR MESSRS. V. ROPS AND CO. OF ST. PETERSBURG.

The well-known firm of Messrs. V. Rops and Co. petroleum refiners, of St. Petersburg, has concluded another highly successful year, and the balance sheet just issued is remarkable evidence of what can be done in spite of the many adverse conditions which have prevailed in St. Petersburg during the past year, and the disadvantages attendant to purchasing oil on an abnormal market at Baku, as has been the case during the period covered in the balance sheet.

The gross revenue for the year was 1,638,129 roubles, and the total expenditure was 1,390,094 roubles. While the profit, taking into account the difference in stocks at the beginning and end of the year, worked out at 198,068 roubles. A sum of 67,890 roubles was written for depreciation, pension fund and income tax, leaving a net profit of 130,178 roubles, which added to the balance of last year's profits shews a total available profit of 131,078.

The refinery at St. Petersburg was established over a quarter of a century ago by Mr. Kops (whose brother is well known in musical circles in London), and since its acquisition by the present limited company it has regularly paid an annual 10 per cent. dividend. The property was taken over for 800,000 roubles, since which time 680,000 roubles has been written off for amortisation. Both Mr. Rops and Mr. Brown are Englishmen of the best type, and by their general management they have shewn to the world at large that it is still possible to run petroleum enterprises very successfully in Russia if only the right men are at the helm.

◆

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended May 12th was 256,000 poods, or 4,129 tons; and for the week ended May 19th was 238,000 poods or 3,837 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended May 11th was 293,000 poods, or 4,725 tons; and for the week ended May 20th was 267,000 poods or 4,305 tons.

Spies Petroleum Co., Ltd.—The output for the week ended May 13th was 130,755 poods, or 2,108 tons. The output for the week ended May 20th was 127,100 poods, or 2,050 tons.

The European Petroleum Co., Ltd.—The production for the week ended May 13th, 1906, was 117,231 poods, or 1,890 tons; and for the week ended May 20th was 116,137 poods or 1,872 tons.

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO MAY 22nd, 1906.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since May 8.	From Jan. 1.	Since May 8.	From Jan. 1.	Since May 8.	From Jan 1.	Since May 8.	From Jan. 1.	Since May 8.	From Jan. 1.	Since May 8.	From Jan. 1.	Since May 8.	From Jan. 1.	Since May 8.	From Jan. 1.
Austria ...	—	874,560	—	336,770	19,850	40,850	—	—	—	—	—	—	—	—	19,850	1,263,180
Belgium ...	—	240	33,500	193,300	—	11,000	—	—	—	5,300	—	—	—	1,416	33,500	200,256
Borneo ...	—	210	—	—	—	—	—	—	731,600	2,580,750	—	240	—	—	731,600	2,581,200
Canada ...	—	—	—	8,000	—	20,000	—	—	—	—	—	—	—	—	—	28,000
Germany ...	5,270	2,013,460	32,480	602,700	—	—	—	—	—	2,320	—	—	—	5,890	37,750	2,634,850
Holland ...	4,720	4,900	—	920	—	—	—	—	400	1,080,910	—	271,000	3,680	26,520	8,800	1,383,770
Roumania ...	—	1.360,000	—	—	—	—	—	1,035,550	—	—	—	—	—	—	—	2,395,550
Russia ...	1,298,080	14,162,040	240	813,800	—	—	845,750	1,604,250	—	—	—	—	—	5,660	2,144,070	16,585,750
Sumatra, &c	—	—	—	—	—	—	—	—	—	976,500	—	—	—	—	—	976,500
U.S.A. ...	15,230	33,982,077	1,253,155	20,271,169	—	523,328	—	18,328,950	—	4,636,380	—	6,502,880	22,720	436,180	1,291,105	84,670,874
Other Countries	500	1,370	300	11,470	—	—	—	—	—	480	—	—	—	210,800	800	224,120
	1,323,800	52,398,857	1,319,675	22,238,129	19,850	595,178	845,750	20,968,750	732,000	9,282,640	—	6,774,120	26,400	686,466	4,267,475	112,944,050

AMERICAN NOTES

A Jennings Gusher.—On the first of the present month the Heywood Bros. Oil Syndicate No. 3 at Jennings came in a gusher, and, according to latest reports, is keeping up a large production.

Mr. J. D. Noble Complimented.—The current issue of the *Petrolia Advertiser* states that thanks to the efforts of Mr. J. D. Noble in forming the Canadian Oil Fields, Ltd., he had shewn the possibilities of that prolific portion of Canada's oil producing section.

In the Leamington Field.—We hear that considerable activity is prevalent in the Leamington field at the present time, consequent upon a number of successes. The production of the Leamington Oil Co. is now placed at 1,000 barrels per month. This company, by-the-bye, is about to pay a dividend of 12 per cent.

Developments at Anse la Butte.—In the Anse la Butte field at present there are five wells producing, while others are being drilled into what it is believed will be the producing sands. Of the five producing wells, three belong to the Heywood Bros.' Corporation, their latest No. 8 having encountered encouraging signs below 1,400 feet.

Texas-Louisiana Production.—It is estimated that the total production of the Texas-Louisiana fields during April amounted to 1,620,000 barrels, as compared with 1,610,000 barrels for March. The production of Jennings and Batson shewed a decline, but that of Humble, Saratoga and Sour Lake display an increase, while the output of Spindle Top and Dayton are remaining stationary.

The Humble Field.—There is considerable energy now being displayed in drilling operations in the Humble field, where at the end of last month 45 wells were being drilled. The shallow sand is attracting attention, and of the above-mentioned number of new wells, 35 were being drilled to the shallow formation. In various portions of the district the upper formations are proving very productive.

Gulf Coast Shortage.—It is reported that the shipments and consumption of Texas-Louisiana crude oil during April exceeded the output by close upon 900,000 barrels. The gross movement and consumption was about 2,800,000 barrels, and the approximate output was 1,600,000 barrels. Estimating train-load transfers of Jennings oil to Texas storage at 300,000 barrels, a shortage will be seen as above mentioned.

From Batson.—From the Batson district comes news that the five wells which were completed during the last half of April were all producers, though none of them appreciably swelled the production. The older wells in the district are shewing a tendency to fall off, and the daily production on the last of April was estimated at 7,900 barrels, which is a drop in the output as compared with the figures at the end of the preceding month.

The Pittsburg Oil and Gas Company.—The Pittsburg Oil and Gas Co's. report for the year ended March 31st, shews a surplus above all charges of $22,125. The company expended $483,000 on a pumping station at Kaylor, Pa., and the laying of 54 miles of pipe and the building of a plant at Marion, Ind., for making gas of oil. This is necessitated by the failure of natural gas in that section. The number of producing wells decreased 18 during the year, and there are now 131 producing wells.

Jennings Transfer.—On the authority of the *Oil Investors' Journal*, we are informed that the Morse Co.'s holdings in the Jennings field, which were recently purchased by T. H. Bass, have since been acquired by the J. M. Guffey Petroleum Co. Leases on six and a-half acres of land in the proven field, 13 wells, of which nine are producing about 3,000 barrels per day, and all equipment, boilers, pumping rigs and earthen storage tanks are embraced in the transaction, but the consideration is not named.

The Ontario Fields.—Efforts have been put forth for several years past to induce the Geological Survey Department at Ottawa to collect data that will be of valuable assistance to all who desire to engage in the work of drilling in various parts of Canada, and to publish same so that it will be easily accessible. The director of the Geological Survey has arranged to send Mr. Dennis, a mining engineer, into the oil and gas fields of Ontario to obtain all the information he can in order that an up-to-date report may be published.

THE AMERICAN FIELD STATISTICS FOR APRIL.

The statistics of American oil field operations for April shew that there was little change recorded in the general situation during the month. A great amount of energy, however, was displayed in the Mid-Continent fields where the general summary revealed 322 wells completed, including 41 dry holes and 40 gassers, while the new production amounted to 13,958 barrels.

In the following table will be found the general summary of wells completed, new production, etc., for the different oil producing fields in April:—

State or Territory.	Completed.	Production.	Dry.
New York..	39	81	6
Pennsylvania	240	1,407	48
West Virginia	109	1,844	37
South-eastern Ohio ..	105	751	46
North-western Ohio ..	143	1,068	20
Indiana	71	992	5
Kentucky and Tennessee	36	678	10
Illinois	108	3,736	20
Kansas	64	442	40
Ind. Ter. and Oklahoma	258	13,516	41
Total	1,173	24,515	273

Illinois, it will be noticed, appears for the first time in the monthly oil report, but no comparison is possible with the preceding month, as the figures are not available. With the Illinois report eliminated, there was an increase during the month of 56 wells completed, 4,937 barrels production and 24 dry holes and gassers. The wells completed in the various fields, exclusive of Illinois, during March were 1,099, the new production was 15,842 barrels, and there were 229 dusters and gassers.

While the Eastern operators complain of the general scarcity of productive territory, there is apparently no end to it in the new Illinois and Mid-Continent oil fields. It will be seen in the above total that Illinois supplied more new production than any State east of the Mississippi river. Out of the total of 1,173 wells completed in April, 493 were credited to the Pennsylvania oil regions, but they supplied only 16 per cent. of the total new production. The fields west of the Mississippi completed 322 wells, of which only 241 were productive, and their new production amounted to 13,958 barrels, or over 56 per cent. of the aggregate yield of new oil. The remaining 28 per cent. came from the districts of Ohio, Indiana, Illinois and Kentucky.

The field operations of the various sections at the close of the month were as follows:—

State or Territory.	Rigs.	Wells Drilling.	Total.
New York	32	39	71
Pennsylvania	141	214	355
West Virginia..	47	114	161
South-eastern Ohio	45	67	112
North-western Ohio	78	149	227
Indiana	76	114	190
Kentucky and Tennessee	23	22	45
Illinois	35	103	138
Kansas	0	38	38
Ind. Ter. and Oklahoma	48	198	246
Total	525	1,058	1,583
Total March 31	462	858	1,320
Increase	63	200	263

AMERICA'S NEW OIL FIELD.

IMPORTANT STRIKE AT HOSKINS MOUND.

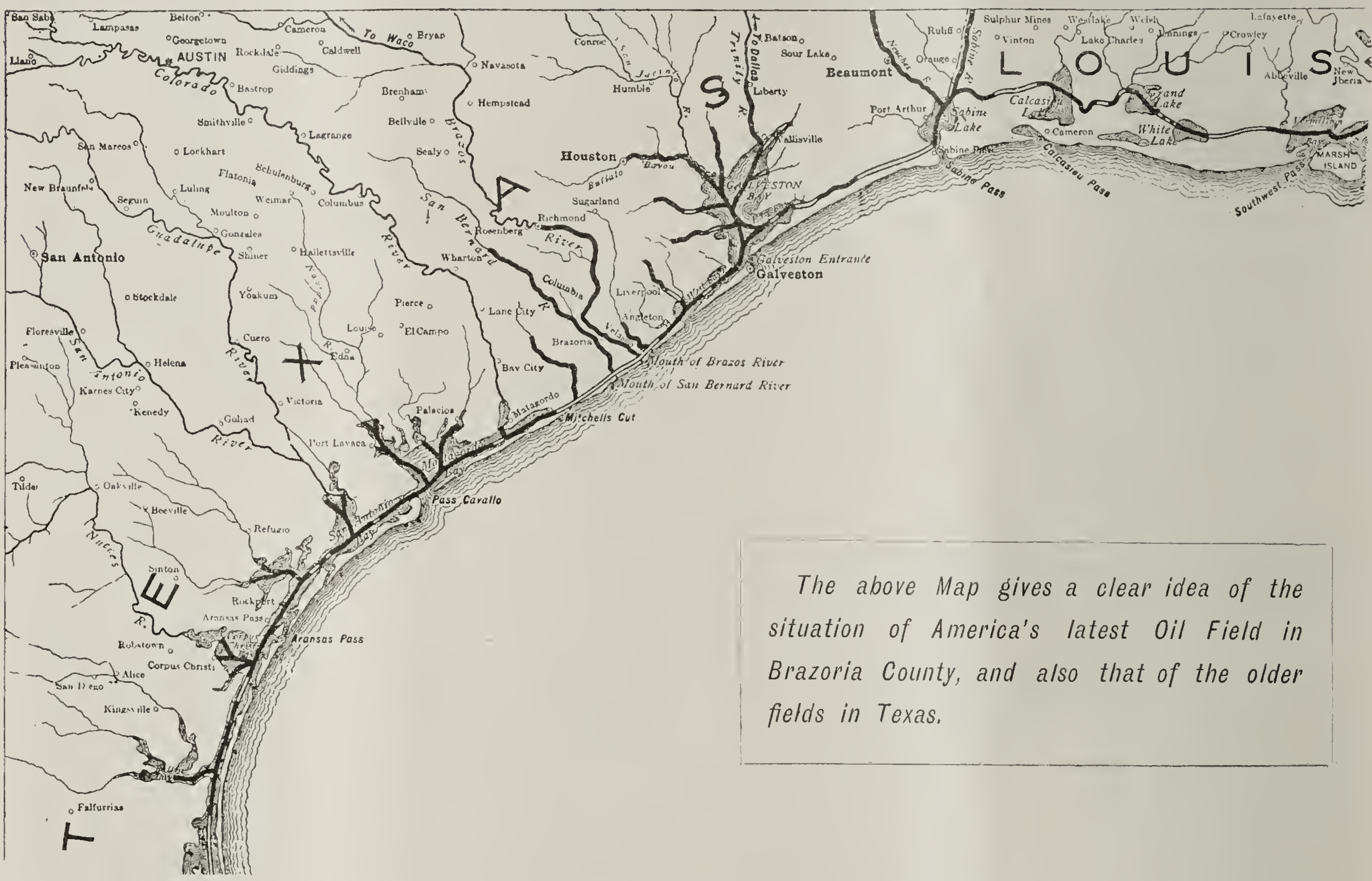
Some time ago we referred in the Review to developments which were being made at Hoskins Mound, a locality in Brazoria county which has been attracting the attention of a number of oil men for months past. The *Oil Investors' Journal* now publishes information concerning the prospecting for oil in that particular district, and acquaints its readers of the fact that as far back as five months ago a very important strike of oil was made by the Mound Oil Co., a concern which is paying great attention to the development of the territory in that part of Brazoria county. The well, which it appears was brought in last November, was producing oil at the rate of 3,000 barrels a day for a time, when it was capped, and since has been furnishing oil when necessary for fuel needs. One significant fact about this well is the remarkable shallow depth at which it was finished, for when it was brought in it was less than 600 feet deep, and ranks therefore as probably the largest well ever completed in America at that depth. Samples of the crude oil shew that it is of a green colour, and possesses an exceptionally low sulphur test, while refinery tests place the oil in a distinct class compared with the oil produced in other South-east Texas fields. The owners, however, believe that an oil of a much lighter grade will be found as the result of deeper drilling.

The Mound Oil Co. directed its attention to this part of Brazoria county a year ago when it purchased what has been long known as the Monte Video Ranch of the Messrs. Hoskins, a ranch which is situated in the southern part of Brazoria county. The tract comprised nearly 40,000 acres in practically a solid block, but since the original purchase some thousands of acres of other land have been added. At the present time it is claimed that the company has nearly 50,000 acres, and practical oil men contend that this company's holdings come nearer making possible ideal conditions of oil production than any other territory thus far proven in the Gulf Coast region.

The location of the new development is about 20 miles south of Alvin and nearly 40 miles south of Houston. Galveston is 23 miles north-east and a pipe line 26 miles long could quickly and easily deliver oil to the wharves in Galveston harbour. A pipe line eleven miles long would reach deep water at Quintana and Valesco at the mouth of the Brazos river.

Near the centre of the tract two prominent mounds are located, known in that region as the big mound and the little mound. The larger one, called Hoskins Mound, comprising about 1,000 acres, has for some years been looked upon as an oil proposition while the little mound is about the size of Spindle Top. Previous to the purchase of the property by the Mound Oil Co., five wells were drilled to various depths on the western side of the big mound, where the strike was made, and although oil and gas indications were obtained in all of the holes, paying production failed to materialise.

The operations of the Mound Oil Co. began in August of last year, when the first well was started. From the very beginning close secrecy was maintained. Few operators were given an opportunity to inspect the camp at the mound or the work being carried on. Guards were placed on the property and scouts were met at the gates about seven miles from the scene of development with a firm and positive order, which prevented knowledge of the progress made from time to time, was strictly observed. Developments in the initial work shew stratifications of a nature satisfactory to the owners, and induced them to put down another hole near one of the old Stribling tests and a producer, to which we have before referred, resulted in November last. To what extent the Mound Oil Co. will continue to develop its holdings is not fully apparent at present. Considerable tankage facilities, however, have already been erected at the scene of development and a four-inch pipe line is now being laid from the mound to a point on the St. Louis, Brownsville and Mexico railroad, a distance of nine and three-quarter miles.



The above Map gives a clear idea of the situation of America's latest Oil Field in Brazoria County, and also that of the older fields in Texas.

. . The Salt Lake Field of California. . .

* * * *

Report by the U.S. Geological Survey.

The Salt Lake oil field of California, which has during the past three years grown to be one of the foremost fields in southern California, is the subject of a report about to be issued by the United States Geological Survey. The field, which is named from its first important producing company, occupies an area approximately a mile square, seven miles west of the business portion of Los Angeles, Cal. It is a part of the Los Angeles-Santa Monica plain, which extends southward with a gradually lessening slope from the base of the Santa-Monica Range toward the hills south-west of Los Angeles. With the exception of a few unimportant ravines which run in a general south-westerly direction across the plain and an extensive slope which descends gradually from the field north-westward toward Sherman, there is little to break the topographic monotony in the vicinity of the wells. A small artificial lagoon made by the removal of large quantities of brea, occupies a depression about 75 by 150 yards near the centre of the southern part of the field. Reference will be made to this lagoon latter in the discussion.

Geologic Formations.—Alluvium and Pleistocene deposits of gravel, sand and clay cover the plain in the region of the Salt Lake field, but surface outcrops of other beds are to be found no nearer than about two miles from the present developed territory. The well logs and a study of the adjacent region indicate, however, that the formations involved in the geology of this field include at least a part of those exposed to the east in the vicinity of the Los Angeles city field and consist of (*a*) 2,000 feet of lower Miocene sandstone, (*b*) 2,000 feet of Pliocene clayey and sandy shale, sandstone and gravel, and (*d*) an unconformable capping of Pleistocene gravel, sand and clay varying in thickness from 40 to at least 100 feet or more, the whole covered by alluvium.

The lower Miocene sandstones are coarse, arkose and heavy bedded, grey to rusty brown in colour, sometimes concretionary in structure and often jointed. They are interbedded at irregular intervals by smaller amounts of dark-coloured earthy and lighter siliceous shales. Toward the top of the series, however, the shales become relatively more abundant. No sharp line of demarkation separates the sandstones from the overlying series, which consists largely of shales of middle and possibly upper Miocene age. The lower 1,000 feet of this series are made up of hard, white, thinly laminated siliceous shale, occuring in bands 200 feet in thickness, alternating with thinner bands of sandstone similar to those of the lower Miocene. About 1,000 feet of soft, thin-bedded sandstone and sandy shale with some hard siliceous members and coarser toward the top, overlie the white shale beds. The upper portion of this upper shale series, and possibly some of the strata of the uperadjacent formation yield the oil, the most productive sands appearing to lie beneath the uppermost prominent band of hard siliceous shale. The oil is probably derived from the diatoms and other minute vegetable remains found in the underlying shale, and finds its way into the sandy layers at the top of the series mainly through the multitude of joint cracks which penetrate both the shale and sandstone. The Miocene shales are overlain (probably unconformably, although having the same general dip) by at least 2,000 feet of Pliocene sediments, which in the Salt Lake field appear to consist largely of clayey shale with occasional interbedded sandy or gravelly layers. The Pleistocene beds are made up of clay, sand and gravel, the clay predominating, and are often highly impregnated with oil, forming brea.

Great deposits of this brea occur in the immediate vicinity of the lagoon and north and north-west of it for a considerable distance. Numerous bones of extinct Pleistocene mammals, such as the saber-toothed tiger, elephant, giant sloth, cave bear, camel and dog are embedded in this area, and indicate not only the age of the deposits, but also the important fact that the conditions favourable to the accumulation of the brea have been in existence here at least since the middle or latter part of the Pleistocene epoch. Heavy oil exudes from the banks of the lagoon and from some of the minor brea pits, while the constant escape of natural gas is evidenced by the continuous streams of bubbles which rise to the surface of the water in the different depressions.

Geology of the Wells.—The wells usually penetrate for the first 50 to 100 feet or more alluvium and clay, with varying amounts of coarse sand and gravel, representing the Pleistocene covering of the older formations. These deposits carry water, which in some instances is mineralised in one or more of the beds. A little heavy oil or asphaltum is also occasionally found in the superficial deposits. In fact, in some parts of the field the oil appears to impregnate the soil and rocks "from the grass roots down." From the Pleistocene to the first important oil sand (which is struck at from 1,000 to 3,000 feet) the beds consist of soft sandy shale ("adobe") and clayey shale, with occasional one to six-foot layers of hard siliceous or calcareous shale ("shell") and sometimes a little sand and gravel. This series belongs in large part to the Pliocene. Oil and gas, increasing in quantity downward, are found in many of the beds of this series, the largest accumulations usually occurring just beneath the hard, impervious "shell" layers. Salt water is also encountered at various depths, the more aqueous horizons appearing at about 150 feet above and between and 1,000 feet above the top of the uppermost productive sand. Another bed carrying salt water is encountered about 150 feet below the lowest important oil sand. This water attains a temperature of 110 degrees in some of the wells. The oil zone proper varies in thickness from 150 to nearly 500 feet, and consists of alternating thick-bedded, rather coarse sand and clayey shale and "shell." Whether or not the sand occurs as persistent layers, or rather as lenses, is problematical, although it is highly probable that it is present in both forms within the area under discussion. This much is known, however, that the uppermost important sand in the wells over a large part of the field appears to occupy the same horizon. The lower limit of the productive zone is usually a sterile white sand, sometimes locally hardened, which yields, at a depth of 150 feet or more below its top, large quantities of warm or hot salt water. One well, it is said, struck some 11 degrees oil in this lowest salt water stratum. A typical section through the oil zone, where the dip is approximately 15 degrees, is as follows:—

TYPICAL SECTION OF OIL-SAND ZONE IN SALT LAKE FIELD.

	Feet.
Sandy shale ("adobe")	300
Oil sand	20
Clayey shale	30
Oil sand	10
Clayey shale	20
Oil sand	20
Hard shale	2
Oil sand	123
Tough brown shale	10
Oil sand	25
Clayey shale	10
Oil sand	10
Clayey shale	86
Oil sand	129
White sand	150
Sand with salt water (hot) and occasionally some 11 deg. oil	200
Total productive sand	337

Structure.—Owing to the almost complete absence of surface evidence in the immediate vicinity, the determination of the local structure of the Salt Lake field rests largely on the interpretation of the well logs. The strictly local structure of the field under discussion will be more fully comprehended if its description is prefaced by a word in regard to the general structure of the Los Angeles district as a whole. Practically all the productive oil sands of the different Los Angeles fields lie on the south limb of a flexure, usually a more or less well-defined anticline, whose axis extends in a westerly direction from the vicinity of the Catholic cemetery on Buena Vista street to the region approximately half a mile north of Westlake Park, where it bends about 20 deg. north and extends to a point about three-fourths of a mile south-east of Colegrove and something over a mile north-east of the Salt Lake field. Here it appears to bend to the north again, probably trending about N. 60 deg. W. In the Los Angeles city field—that is, between the Catholic cemetery and the Westlake Park region—the south limb of the flexure dips normally at angles varying from 39 deg. to 80 deg., while to the west, along that portion having a north-westerly trend, the dips flatten to 20 deg. or 25 deg. The Salt Lake oil field is located on the north-western flank of a minor but probably somewhat complex fold or flexure developed on the comparatively low-dipping south-west limb of the major flexure just described.

The exact nature of the local flexure is not known, but it is probably an anticline, possibly complicated by faulting, with its axis extending in a general north-east-south-west direction. The available evidence appears to indicate that the flexure extends from near the centre of the S. E. ¼ sec. 15, T. 1. S., R. 14 W., at least as far as the lagoon in the S. W. ¼ sec. 21, but whether or not it continues farther to the south-west is problematical. The large accumulations of brea in the immediate vicinity of the lagoon and to the north and north-west of it, in addition to the constantly exuding oil and escaping gas over the same area, indicate some sort of a profound local disturbance or fracture in the underlying beds. If this disturbance has an extensive longitudinal dimension in a north-westerly direction from the lagoon, as some of the evidence appears to suggest, then it is possible that this north-westerly trending disturbance may cut off the Salt Lake flexure from a south-westerly extension beyond the lagoon. If, however, the disturbance in the vicinity of the lagoon is of the nature of a local bulge or dome in the underlying beds, it is very likely that the Salt Lake flexure may have a considerable south-western prolongation.

The strike of the oil sand of the north-west limb swings around from a nearly east-west line in the region north of the lagoon to a direction slightly west of north in the N. E. ¼ sec. 21. The dip of the sand in the region about the centre of sec. 21 does not appear to be much more than 10 deg. to 15 deg., but it increases rapidly in steepness both south-east up and north-west down the dip. The region immediately south-east of the Salt Lake flexure, although supporting some small producing well—one of which attains a depth of nearly 3,000 feet—does not compare in productiveness with the territory to the north-west. This condition may be explained on several hypotheses the two most probable being either (*a*) that the Salt Lake flexure is accompanied by faulting which has dropped the productive sands on the south-east down out of reach of the drill or raised them up to such an elevation that they were eroded away in a period subsequent to the faulting, or (*b*) that the continuation of the productive beds passes over the flexure (in this case an anticline) and down on the south-eastern flank, but under conditions unsuited to the accumulation of the oil in the large quantities encountered on the north-western limb.

With regard to future development, the writer of the report states that any one at all familiar with the conditions of occurrence of petroleum in the California fields knows that any but the most tentative predictions as to the location of the oil are extremely hazardous. The following suggestions, based on the evidence in hand, although lacking definiteness for the reasons above stated, may be of some assistance to those engaged in developing this field.

It seems probable that the productive zone of the Salt Lake field extends northward, and possibly a little westward from the territory now developed. Just where the northern limit is located is problematical, but it is quite certain that it is considerably south of the base of the Santa Monica Range. Within this northern extension the beds in general dip to the west, and for this reason the most productive area will doubtless be found west of La Brea road. East of this road the oil sands approach the surface, and consequently yield smaller quantities and heavier oil than do the same beds farther down the dip. As shewn by several wells drilled in the region south-east of the Salt Lake flexure, this territory does not appear to offer many inducements for exploitation, at least in the immediate vicinity of the Salt Lake field. Farther east, however, in the region west and south-west of Westlake Park, in case deep wells strike a local flexure similar to that in the Salt Lake field, such wells should yield large quantities of oil and gas. If the disturbance or fracture extension, terminating the Salt Lake flexure and the productive zone on its north-west flank, then it appears highly probable that deep wells will strike productive sand in the southern part of sec. 20, and the northern parts of secs. 29 and 30, T. 1 S., R. 14 W.

There are at the present time between 75 and 80 productive or drilling wells in the Salt Lake field belonging to the following companies:—Salt Lake Oil Co., about 50 or 55; Arcturus Oil Co., 9; Utah Oil Co., 1 (these three companies controlled by the Associated Oil Co.); A. F. Gilmore, 4; Pacific Light and Power Co., 4; E. P. Clark Oil Co., 7. In addition to the wells mentioned above there are several comparatively shallow small producers, belonging to the last-named company. These are located near the northern half of the line separating secs. 28 and 30 and are pumped intermittently. The wells north-west of the Salt Lake flexure vary from 1,200 to over 3,100 feet in depth. The deeper wells are as a rule the more productive and yield the lighter oil. The individual wells produce from 20 to over 1,000 barrels a day, the average being somewhere in the neighbourhood of 200 barrels. Owing to the tremendous gas pressure in this field, nearly all the wells "gush" when they first come in, and it is said that one of the deep wells produced about 18,000 barrels a day for a short time after its inception. The gravity of the oil varies from 11 deg. to 22 deg., the heaviest oil coming, it is said, from an isolated sand below the regular productive zone. The average for the field is between 16 deg. and 18 deg.

The production of the Salt Lake field has risen from a few thousand barrels in 1902 to something over 4,000,000 barrels in 1905. Facilities for handling and storing the oil have kept pace with the increase in production until at the present time the storage capacity of the field is about 390,000 barrels, 20,000-barrel to 55,000-barrel steel tanks being largely used. An eight-inch pipe line connects the field directly with Los Angeles, and smaller lines run from some of the properties to tanks and racks on the line of the Los Angeles Pacific Electric railroad, immediately south of the field. The oil is used principally in supplying the local Los Angeles market although considerable quantities are said to be shipped to outside points.

The large quantities of gas which come from the wells are used mainly for the generation of power for operating and development, although a small amount is used in the field for domestic purposes.

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The Receipts of the Greek petroleum monopoly in February, 1906, amounted to 535,170 drachmas against 537,825 drachmas for the corresponding month of 1905.

THE CEDROS OIL FIELDS OF TRINIDAD.

REPORT BY THE GOVERNMENT GEOLOGIST.

(Continued from page 336.)

At a distance of one and three-quarter miles west of the mouth of the Majawal River, the crest of the anticlinal fold reaches the shore in a mass of fine stiff clays, flanked at some little distance on either side by hard grey calcareous sandstone beds, which represent some part of the lower Galeota sandstone. The anticlinal fold is sharp, but not very well seen owing to the slipped and washed down state of the clay cliffs: it passes obliquely into the sea. There are many indications of oil in this vicinity; thin sandstone beds up to 1 foot 6 inches in thickness, of a dark brown colour full of oil, appear in the cliff and shore sections, but there is no exposure of the No. 1 oil streak. Pyrites nodules in these beds are not uncommon. The whole section, clays, sandbeds and pyrites nodules, resembles very closely the section in Picton Estate, Naparima, cut by the Colonial Company for a railway.

At Chagonary Point the anticlinal fold crosses the promontory, emerging from the sea and plunging into it again upon the western side, after which it skirts the shore as far as Erin Point. There are frequent indications of oil along this part of the coast wherever there is a section of the clays displayed. The shore at Chagonary, Talparo and Erin Points is strewn with large blocks of hard sandstones, coarse grits and conglomerates, masses of radiate calcite, pyrites nodules, etc. These have probably been washed up from submarine outcrops of the No. 1 oil streak and the rocks associated with it. Many of the sandstone blocks still retain traces of petroleum.

From Erin Point we ascend in the series rapidly, as we descend the northern side of the anticline, the crest of which runs out to the sea across Erin Bay. The section northward from Erin Point is rather obscure, and the estuary of the Erin River, with a swamp of considerable size, conceals all evidence of the locality where the Rio Blanco oil sand should crop out on the shore.

From the Erin landing place the section becomes more continuous, and a series of sandstones with intercalated clays, lignitic shales and lignite seams is exposed, the dip becoming gradually lower as we proceed westward and ascend in the series towards the centre of the basin. Porcellanites make very conspicuous features in the landscape towards the western end, and one of these, near Chatham, is the highest rock of the series exposed in the coast section. The lignites and porcellanites will be treated of fully in a special report.

Beyond Chatham the section is lost altogether, the land being fringed by a swamp of considerable extent (the Erin lagoon). It is evident, however, that we are descending in the series again, for at Islet Point the crest of the anticline emerges again, runs through the island between swamp and sea which gives its name to the point, and re-enters the sea. The section at Islet Point is very obscure, soft clays of lower Galeota type form a low washed-down cliff, at the base of which blocks of grit, conglomerate, sandstone with coaly strings, oil rock and radiate masses of calcite, and crystalline groups of pyrites, etc., are strewn. Some sandstone beds cross the point inland, and a series of oil-shows indicate the position of the anticlinal crest.

From Islet Point the swamp continues as far as Galfa Point, where similar clays and washed up blocks occur again. The odour of petroleum is very distinct for a distance of half a mile along the shore in this neighbourhood, and outcrops of dark brown sandstone saturated with oil occur amidst the clay exposed on the foreshore. In addition, large blocks, some as much as ten feet in thickness, of oily sandstone, sometimes slightly calcareous, lie below tidemark. There is evidence of former landslips, which appear to have displaced some of the large blocks. An interesting point in connection with some of these blocks may be mentioned, as it may throw light upon the occurrence of oil and the oil-bearing capacity of sandstones. Where a bed of sandstone is cemented by lime in any quantity, it is usually compact, pale in colour, and not petroliferous, while a similar thin bed in the immediate neighbourhood is non-calcareous, soft, friable, very dark in colour and full of oil. In some cases a bed of greater thickness is found partly white, compact, and calcareous, and partly dark and petroliferous, with the oil perhaps concentrated along joint planes and along certain bedding planes. The calcite may also be concentrated in certain parts and may form thin veins, with the fibrous structure, which gave the name "beef" to such calcite veins in the Rhætic rocks of England. It appears that either the carbonate of lime has never been present in quantity in the petroliferous patches, or it has been removed by solution. In this connection the veinlets of "beef" calcite and rounded masses of calcite crystallised in radiate groups acquire new significance. Such calcite veins and masses are very frequent in the neighbourhood of outcrops of the No. 1 oil rock both on the southern and central anticlines of the Mayaro-Guayaguayare oil field and are also brought up from below the surface in the larger mud volcanos. It appears possible that these calcite masses may represent the carbonate of lime formerly existing as the cementing material of a sandstone, removed in solution during some part of the process of the formation of oil, and crystallised in the softer clay, which it might be able to force aside, or in joints in the sandstone. The effect of the removal of lime would be to leave a very porous sandstone, capable of containing large quantities of oil. At what stage such an action would be possible is a matter more of chemical than geological interest, and cannot be entered into here, but the facts that the lower sandstones of the tertiary series are almost without exception calcareous, and that those masses of calcite are only associated with porous and non-calcareous oil rocks, seem to point to some connection between their formation and the production of petroleum. The association of thin hard calcareous beds with thin oil-bearing beds, intercalated with the clays, was also observed east of Erin on both sides of the anticline.

Beyond Galfa Point there is no good section. A low clay cliff forms part of the shore line at a distance of a mile to the westward, but the rest of the promontory of Icacos round to Los Gallos Point is formed of swamps and recent marine deposits, accumulations of sandbanks formed by the constant westerly drift due to the prevailing wind. An interesting point is presented by the action of the waves and tides now in operation. Both to north and south of the Icacos promontory the sea is gradually encroaching on the land, cutting off line after line of cocoanut palms. On the estate north-east of Brigite Point the ruin of an old distillery, which, I am informed, stood a thousand feet inland thirty-nine years ago, is now below tidemark. The drift carries sandbanks westward along the shore, and the sand gradually accumulates on that part of the coast between Icacos Point and Brigite Point, where in consequence, the land is gaining rapidly. All the area of marine deposits and swamp south of Los Gallos Point has been reclaimed from the sea by natural action, and the orientation of the strips of swamp and sandbank north-east of Icacos Point shews the direction, and the successive stages, of growth of this stretch of marine alluvium. But for the hard sandstone ridge running from Los Gallos Point eastward this sandbank deposit could never have been formed.

In the Cedros district there is an increase of arenaceous deposits at the expense of argillaceous, but near the base of the series the clays are still of considerable thickness.

At Los Gallos Point the rocks exposed are evidently fairly high in the tertiary series; sandstones predominate, and there is a remarkable display of false bedding and local erosion, almost amounting to a local unconformity. It is evident that these strata were laid down by strong currents near an estuary.

The coast section to Cedros Point is merely a repetition of the Erin coast section, with local modifications. The centre of the basin is reached about two miles east of Cedros Point. Several traverses were made in this district, and the coast section was carefully examined, on account of the necessity of proving the structure, but the ground inland was not mapped in detail, as it appeared that no very important economic results would be obtained. The coals and porcellanites of this district will be treated of in the special report previously mentioned.

It is necessary to give a brief description of the oil-shows observed during the mapping of the area to make clear on what evidence the extension of the petroliferous strata, and their presumably productivity is based.

The oil-shows may be divided roughly into pitch deposits, seepings of oil, outcrops of petroliferous rocks and mud volcanos, the last including mud pools with evolution of gas. These four phases are so intimately connected that it is rare to see evolution of gas without oil, or oil seepings without pitch, while usually all three phenomena are present. These "shows" have been observed in so many localities, sometimes far apart and sometimes close together, that it is unnecessary to enumerate all of them, but the more striking examples certainly deserve description. There can be no doubt that owing to the rapidity with which the survey was made, very many similar indications have been overlooked.

The indications of oil seen near the crest of the anticline are referable to petroliferous beds of the horizon of the No. 1 streak; these are by far the most numerous and the greatest in extent. The anticline, where it is unbroken by an inlier of cretaceous strata, is as a rule very sharp, as the recorded dips shew, though in some localities where evidence is scanty, there may be a broader and more gentle curve upon the crest.

About one mile west-south-west of Lagoon Bouff, on the north of a small inlier of cretaceous rocks, occurs the largest show of actual oil that I have seen in Trinidad. Two small creeks unite at this point and flow northward through the outcrop of the lower Galeota sandstone. The water in the western branch of the creek was entirely covered with oil for a distance of a hundred yards at the time of my visit, while small pools of oil occur also in the eastern branch and in the ground to the westward. Gas bubbles up briskly in scores of places in the creeks and for some distance to the south of the first sign of oil. One large gas well was ignited, and it burnt for upwards of an hour, the flames reaching two feet in height. The show of gas and oil extends for a distance of nearly 300 yards from north to south, and for upwards of a quarter of a mile from east-north-east to west-south-west, the direction of strike. The strata are very poorly exposed except to the north of the show; the dips observed vary between 60 degrees and 30 degrees decreasing to the northward. The oil rock does not appear to crop out actually, but it must be very near the surface, if there is not a concealed outcrop.

At a distance of three-quarters of a mile south-west of this show, outliers of tertiary strata are found lying almost horizontally on the eroded surface of cretaceous clays, and these local basement beds of the tertiary series yield distinct though smaller indications of oil in a small creek running westward. Brown sandstones impregnated with oil, small deposits of pitch in the soil, and evolution of gas with a few drops of oil in the water of the creek occur at intervals for a distance of five hundred yards. One very typical rock must be mentioned here; it is an iron-stained and cemented conglomerate composed of fragments of cretaceous rocks, a thin bed, associated with rusty sandstones and forming the base of the tertiaries locally. It is frequently impregnated with oil. Evidence of impregnation of the cretaceous clays and sandy clays is not lacking also, for slow evolution of gas with signs of oil takes place from the cretaceous strata in the beds of creeks at several points.

A quarter of a mile to the south-west, where the unconformable junction of cretaceous and tertiaries is again seen, the lowest beds of the latter is impregnated.

These oil-shows from thin cappings of tertiary strata lying on the older rocks are not important in themselves, but they serve to shew that the oil-forming conditions extended over a wide area. They may be considered as outliers in the No. 1 streak.

The next indication of oil is precisely similar; it occurs two and a-half miles to the south-west, where again very thin outliers of tertiary rocks are seen resting on the cretaceous. The iron-cemented conglomerate is well seen here, and is occasionally found to be full of a sticky brown oil. The beds lie almost horizontally, but a gentle anticlinal bend can be made out. This without doubt is the denuded vestige of the tertiary anticline, preserved in an outlier upon the broad expanse of cretaceous strata. Other similar outliers probably exist in the neighbourhood, and to the westward, but the evidence is not sufficient to enable them to be mapped out, nor would any useful purpose be served by so doing.

Westward of this point no oil show has been observed as far as the Moruga River, though, from information received, it is possible that there is an outcrop of the lower oil rock against the inlier of cretaceous in the ground to the north-west. This was searched for, but not found, and time did not permit of a more complete examination of the ground.

(To be continued.)

The American Oil Market.

New York, Week ended May 12th.

The location of interest has shifted from Ohio to Illinois, if the accounts in the papers of that State are to be credited. It appears that the strike of a few good wells in that state has caused the usual excitement attending the discovery of oil in a new region. It is claimed that operators are flocking from the older producing States, and especially from Pennsylvania, to secure leases and drill wells. Thus far, while the accounts are somewhat conflicting, and for the most part rosy hued, it is unquestionable that a field of considerable importance is being developed, and it may prove an important factor. The wells, however, are not of the gusher variety, but it is yet too early to gauge the importance or extent of the prolific area. From the other Northern producing States, says the *Oil, Paint and Drug Reporter*, no very important developments have been reported. The number of completions during the past week has shewn no increase, notwithstanding that the roads are now in better condition, and there have been no serious hindrances to the prosecution of field work by reason of severe storms or other unfavourable conditions. Of the completions reported very few proved to be large wells, and it is doubtful if the average production shews any improvement, the large majority of the new wells being small pumpers, while the percentage of failures to find oil was fully as large as during April. The outlook for improvement is regarded as dubious, notwithstanding that it is apparent that the operators are disposed to pursue an active search for oil this summer, despite the fact that the results have been so unsatisfactory during the past few months. In the mid-continent fields development operations are still unchecked, despite the fact that considerably more than half the production must go into storage tanks, and stocks continue to increase at a rapid rate. In Texas the production shews little change, but the shipments are increasing and stocks diminishing. Prices for Texas and Louisiana oil shew no further change, but are held very firm, and advances are expected.

Refined and Products.—The demand for refined for export has shewn some increase during the past week, there having been more tank vessels on this side. There is no change in the situation abroad, and the variation in exports from week to week is due entirely to the varying position of the tank fleet. The engagements during the past week amounted to about 200,000 barrels, all for shipment in bulk.

The price for barreled oil has remained firm at 7·80c. for New York loading, and at 7·75c. for Philadelphia loading. The principal foreign markets are firm. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. 3d. @ 3s. od. to Continental ports, as to port and vessel.

Cases for export have been in good request, and sales of about 300,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in fair request, and sales of about 35,000 barrels are reported. Pennsylvania crude is quoted at 7·80c. in barrels.

Crude naphtha continues steady. For export, sales of about 5,000 barrels have been reported.

CLOSING QUOTATIONS.

Crude.		Week ended	
		April 28. 1906.	May 12. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4·70	4·70
Residuum, bbls. for export	.. ..	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were:—

	Week ended	
	May 12. 1905.	May 12. 1906.
Tiona	1·44	1·74
Pennsylvania	1·29	1·64
North Lima	0·87	0·98
South Lima	0·82	0·93
Indiana	0·82	0·93
Canadian Oil:		
Petrolia	1·29	1·37

Refined—For Export.

		Week ended	
		May 5.	May 12.
Cargo Lots for export	per gal.	7·60	7·80
In bulk		4·70	4·70
Philadelphia loading		7·55	7·75

Refined in Cases—110 Fire Test.

	Week ending	
	May 5.	May 12.
5,000 to 10,000	10·35	10·35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended	
		May 5.	May 12.
120 fire test, S.W.	per gal.	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ending	
	May 5.	May 12.
Naphtha, crude, car lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	14	14

Pennsylvania Oil Runs from May 4th to May 9th were:—May 4th, 49,194; May 5th and 6th, 90,092; May 7th, 68,955; May 8th, 62,436; May 9th, 68,342. For the month of March, 2,269,617.

The Deliveries of Pennsylvania Oil for the same dates were:—72,462; 113,616; 79,899; 67,321; 71,436. For the month of March, 2,189,894.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended May 11th and from Jan. 1; were as follows:—

	Week.	Year.	1905.
Refined, barrels and bulk	201,100	3,995,900	3,877,000
Refined, cases	280,000	5,971,000	8,919,000
Crude, barrels and bulk	34,000	678,500	395,600
Crude, cases	—	187,000	50,000
Naphtha, barrels	—	176,000	181,200
Residuum, barrels	—	288,600	368,400
Lubricating, barrels	—	128,200	54,400
Total, barrels cde. eq.	450,016	9,080,572	9,727,332

Clearances for the Week.

During the week ended May 11th, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1905.
Refined	10,118,230	173,507,780	180,087,521
Crude	—	226,800	621,744
Naphtha	104,850	7,461,567	5,071,323
Residuum	—	—	3,294,915

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended May 11th	13,490,973
Total from New York, from Jan. 1, 1906	231,587,187
Same period last year	240,738,439
Decrease	9,151,252
From United States, week ended May 11th	22,231,876
Total from United States, since Jan. 1, 1906	419,367,482
Same period last year	442,906,297
Decrease	23,538,815

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The "Review" Shipping List.

May 24, 1906.

(*The following abbreviations are used in this table:*—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Sables d'Olonne	Philadelphia	Arr. May 17
ALCHYMIST	Shoreham	London	Arr. Apr. 24
AMERICAN	Antwerp	New York	P. Lizard, May 21
APPALACHEE	San Francisco	Shanghai	L. May 1
APSCHERON	Hamburg	Tyne	Arr. April 17
ARAL	Tyne	Philadelphia	P. Dunnet Head, May 22
ARAS	Penarth	Novorossisk	P. Consti'ple, May 17
ARGYLL	Buenos Ayres	Rosario	Arr. May 10
ASTRAKHAN	Hamburg	Tyne	Arr. May 11
AUGUST KORFF	Philadelphia	Nordenhamn	P. Del. Break., May 13
AUREOLE	Tyne	Batoum	P. Gibraltar, May 21/22
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Rouen	Tyne	Arr. Apr. 28
BALAKANI	New York	London	L. May 17
BATOUM	Copenhagen	Tyne	Arr. May 20
BAYONNE	Philadelphia	Genoa	Arr. May 9
BEACON LIGHT	Batoum	Antwerp	Off I. of. W., May 23
BEME	Rangoon	Calcutta	L. May 16
BLOOMFIELD	Tyne	New York	L. May 13
BORJOM	Alexandria	Batoum	P. Dardanelles, May 4
BRILLIANT	New York	Amsterdam	L. May 19
BROADMAYNE	Tyne	Philadelphia	Arr. May 22
BULLMOUTH	Palembang	Singapore	Arr. May 13
BULYSSES	Hamburg	Kustendje	P. Gibraltar, May 15/6
BURGERMEISTER PETERSEN	Hamburg and Tyne	Philadelphia	P. Dunnet Head, May 16
CADAGUA	Seville	—	At Gibraltar, May 21/22
CALCUTTA (Br. bq.)	San Francisco	Shanghai	L. Mar, 14
CARDIUM	Cardiff	BalekPappan	L. Apr. 10
CAUCASIAN	Philadelphia	London	P. Del. Break., May 11
CHARLOIS	Philadelphia	Antwerp	P. Reedy Island, May 9
CHESAPEAKE	Philadelphia	Manchester	At Liverpool May 23
CHESTER	Antwerp	—	P. Dungeness, May 23
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Samboe	—	L. May 21
COWRIE	Singapore	—	L. Port Natal, May 21
CYMBELINE	Newport	Del. Break	P. Brow Head, May 12
CZAR NICOLAI II.	Antwerp	Batoum	Off Ushant, May 20
DAGHESTAN	Batoum	Dunkirk	P. Consti'ple, May 18
DAKOTAH	San Francisco	Shanghai	Arr. Apr. 4
DELAWARE	Liverpool	New York	Arr. May 21
DEUTSCHLAND	Rotterdam	New York	P. Lizard, May 16
DIAMANT	Tyne	Philadelphia	L. May 19
ELAX	Singapore	—	L. May 21
ELISE MARIE	New York	Rotterdam	Arr. May 21
ENERGIE	Philadelphia	Hamburg	Arr. May 22
ERIVAN	Tyne	Batoum	P. Gibraltar, L. May 23
EUPLECTELA	Tyne	Philadelphia	L. May 22
EXCELSIOR	New York	Rotterdam	P. Prawle Pt., May 22
EZIO	—	—	Coasting Peru
FRANCE MARIE	Barcelona	Philadelphia	P. Tarifa, May 4
GEESTEMUNDE	Stettin	—	P. Helsingborg May 22
GENESSE	Philadelphia	Liverpool	L. May 12
GEORGIAN PRINCE	Liverpool	Cienfuegos	Arr. May 15
GOLDMOUTH	Singapore	—	L. Apr. 30

Vessel.	From.	For.	Latest Date and Position.
GUT HEIL	New Orleans	Havana	L. Port Eads May 10
HAINAUT (Dch.shp.)	Alexandria	Antwerp	L. Oran, May 16
HARRY WADSWORTH	Liverpool	Ibrail	P. Const'iple, May 22
HELIOS	Rotterdam	New York	P. Dover, May 14
HOTHAM NEWTON	Hartlepool	—	P. Dover, May 22
HOUSATONIC	SanFrancisco	Bombay	Arr. Shanghai, May 10
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Vallo	Taganrog	P. Dardanelles, May 15
J.B. AUG. KESSLER	Alexandria	Sumatra	P. Eden, May 8
JAMES BRAND	Thameshaven	Tyne	Arr. Mar. 17
KURA	Newport	Constant'ple	L. May 19
LA CAMPINE	Antwerp	Philadelphia	Arr. May 15
LA FLANDRE	Ghent	Philadelphia	L. May 23
LA HESBAYE	Antwerp	Kustendje	P. Gibraltar, May 14
LA MADALEINE	Antwerp	Leghorn	Arr. May 13
LA VIGUESA	Marcus Hook	Gijon	Arr. May 13
LACKAWANNA	Calcutta	Bangkalis	L. Apr. 30
LE COQ	Philadelphia	Blaye	Arr. Pauillac May 15
LOUTSCH	Messina	Novorossisk	Arr. Const'ple, May 5
LUCERNA	Tyne	Philadelphia	Arr. May 15
LUCIFER	Hamburg	Rouen	Arr. May 22
LUCIGEN	Philadelphia	Sunderland	P. Del. Break., May 11
LUCILINE	Philadelphia	Rouen	P. Havre, May 21
LUMEN	Bouc	Batoum	P. Const'iple, May 15
LUX	Rouen	Tyne	Arr. May 17
MAKKAVEI	Batoum	Odessa	L. Apr. 21
MANHATTAN	Venice	Philadelphia	Arr. May 13
MANNHEIM	Hamburg	New York	Arr. May 21
MARGARETHA	Middleburg	Taganrog	Arr. Const'ple, May 17
MEXICAN PRINCE	Cienfuegos	Liverpool	Arr. May 11
MIRA	New York	Bombay	Arr. May 11
MUREX	Bombay	Soesoe	L. May 22
NARRAGANSETT	London	New York	Arr. May 15
NERITE	Shanghai	Hankow	L. May 19
NEW YORK	Southampton	New York	E. of Nantucket, May 18
OCEAN	Amsterdam	New York	Arr. May 15
ORANJE PRINCE	Tyne	Banes	Arr. May 1
ORIFLAMME	Port Talbot	Philadelphia	P. Fastnet, May 18
OSCEOLA	Nicaragua	Boston	Arr. May 14
OTTAWA	Philadelphia	Vera Cruz	P. Galveston May 8.
OURAL	Batoum	St. Louis (Rhone)	P. Constanti'ple, May 22
PALEMBANG	Bangkok	Palembang	L. Apr. 7
PAULA	Philadelphia	—	P. Dungeness, May 20
PECTAN	Port Arthur (Texas)	Dover	L. May 14
PENNOIL	Philadelphia	Rotterdam	Arr. May 21
PERLAK	Singapore	Palembang	L. Apr. 21
PHOEBUS	Rotterdam	New York	Arr. May 22
PINNA	Port Arthur (Texas)	Dover	P. Lizard, May 23
POTOMAC	Dublin	Philadelphia	Arr. May 15
PROMETHEUS	Tyne	New York	Arr. May 22
PRUDENTIA	Kustendje	Rouen	P. Gibraltar, May 22/23
RION	Tyne	Libau	Arr. Mar. 18
ROCK LIGHT	London	Cardiff and Constanti'ple	At Cardiff, Apr. 26
ROSSIJA	Hamburg	Batoum	P. Malta, May 18
ROTTERDAM (Now C. F. Tietgen)	Copenhagen	New York	Arr. May 10

Vessel.	From.	For.	Latest Date and Position.
RUSSIAN PRINCE	Philadelphia	Havana	L. May 14
SALAHADJI	Singapore ..	BalekPappan	L. Apr. 21
SEMINOLE	San Francisco	China	L. May 5
SILVERLIP	Cardiff......	Borneo	P. Barry Island, May 16
SINGU	Rangoon....	Cochin	Arr. Apr. 29
SNOWFLAKE	Hull........	Port Arthur (Texas)	P. Prawle Pt., May 5
SOPHIE	Genoa	Savona	Arr. May 15
SPONDILUS	East Indies	Rotterdam ..	Arr. May 22
STANDARD	Philadelphia	Swinemuude	P. Butt of Lewis, May 20
STROMBUS	Singapore ..	—	L. May 19
SURAM	Batoum	London	Arr. May 23
SUWANEE	London	Kustendje ..	P. Gibraltar, May 20
SVIET	Batoum	Alexandria ..	L. Coast'iple, May 15
TELENA	Cardiff......	Singapore ..	L. Suez, May 10
TEREK............	Manchester	Port Arthur (Texas)	P. Old Head of Kinsale, May 15
TIFLIS	Batoum	Hamburg ..	P. Gibraltar, May 22
TIOGA	—	—	In Pt. Liverpool, May 21
TONAWANDA	Kurrachee ..	Newcastle .. (N.S.W.)	Arr. Apr. 30
TROCAS	BalekPappan	—	L. May 18
TURBO	Cardiff	Philadelphia	Arr. May 22
TUSCARORA......	New York ..	Calcutta	Arr. Apr. 26
TWINGONE	Rangoon....	Calcutta	L. May 21
VEDRA	Tyne	Ibrail	P. Sagres, May 15
VILLE DE DIEPPE	Dieppe......	Havre	Arr. Apr. 26
VILLE DE DOUAI	Calais	Philadelphia	Arr. Hull, May 23
VOLUTE	Singapore ..	—	L. May 21
WEEHAWKEN	Tyne	New York ..	Arr. May 20
WILLKOMMEN ..	Philadelphia	Danzig	L May 15
WINNEBAGO (late Kinsman)	San Francisco	Hong Kong	At Yokoha prev. May 10

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

May 25th, 1906.

Refined petroleum is unchanged in price, and very little business doing.

The latest quotations are for Russian and Roumanian, 6d.; American, 6¼d.; Water White, 7¾d.

LUBRICATING OILS

are unaltered, the following being the latest quotations:—

American pale, £7 15s. to £9 10s.
American dark cylinder, from £7 10s.
American filtered cylinder, from £11.

TURPENTINE.

American Turpentine is very firm at 49s. to 49s. 3d. for Spot; June, 47s.; July to December, 45s. 9d.

LIVERPOOL OIL MARKET.

May 24th.

Refined oils are quiet, and sellers now quote 5⅞d. for Russian, Galician or Romanian; and 6⅜d. to 7⅞d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, May 24th.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, May 24th.

Standard White is quoted at 7·55.

RUSSIA.

Baku, May 21st.

The Baku oil market is firm, shipments to Astrackan are proceeding at a forced rate. The prices are: Light crude oil, spot, 25⅛ copecs per pood; future, 24 copecs per pood; kerosene, in ships, future delivery, 28 copecs; residuals, spot, 27¼ copecs per pood.

BELGIUM.

Antwerp, May 19th.

The petroleum market is unchanged. Price of Standard White, spot, 19½ francs; June, 19⅝ francs per 100 kilos.

GERMANY.

Hamburg, May 19th.

The kerosene market is firm. The price of American Standard White is 7·10 marks per 50 kilos.

ROUMANIA.

May 23rd.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs. ...	3·50-3·60
Refined oil, exclusive of taxes	12·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery ...	3·00- —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural...	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail including octro tax of 12 fcs. per 100 kilos

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
„ sp. gr. 0·720-0·725	8·00- 9·00
„ sp. gr. 0·735-0·760	6·00- 7·00

INDIA.

Bombay, May 4th.

Market unchanged on prices.

American, "Snowflake," 150 deg.	Rs. 6	0	2
„ Chester, 125 deg.	4	8	2
„ Monkey Brand, 125 deg.	4	2	2
Russian, "Anchor," 125 deg.	4	14	0
„ "White Camelia" brand, 125 deg. ..	4	0	2
Borneo Cobra, in tins, per pair	3	3	0
Sumatra "Rising Sun," bulk	2	15	0
„ "Rising Sun," bulk, in local made tins ..	3	10	0
„ Silverlight Cases, per case	4	8	0
Burma Oil, in bulk, per 8 imperial gallons	2	11	0
„ "Elephant" brand, in local made tins ..	3	10	0
„ Bulk, in Bombay Bazaar, 125 deg. per 10 gallons..	3	3	6
Borneo oil in bulk	2	14	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED MAY 15TH, 1906—

DATE	PORT AND IMPORTERS.	DESCRIPTION.	NO. OF GALLS.	PORT WHENCE.
May.	LONDON—			
10	Vacuum Oil Co.	Lub.	240	Hamburg
10	Schenker and Co.	,,	1,130	Antwerp
11	T. H. Lee	,,	115	Hamburg
11	J. Barber and Co.	Lub. Gr.	1,200	,,
11	Consolidated Pet. Co. (Kura)	Gas	845,750	Batoum
12		Lub.	2,500	New York
12	L. and India Dock Com. ..	,,	240	,,
12	London Oil Storage Co. ..	,,	1,680	Hamburg
14	G. W. Sheldon and Co. ..	M. Lub.	550	Antwerp
14	,, ...	M.L. C.	1,520	New York
14	Fielder, Hickman and Co...	Lub.	2,360	Antwerp
14	J. Harrison, Ltd.	,,	300	Treport
15	J. Spurling	,,	1,040	Hamburg
15	Fielder, Hickman and Co...	,,	1,600	New York
15	H. Grey, Jun.	Lamp	500	Suez
15	Van Dam and Co.	N.Benz.	400	Rotterdam
	LIVERPOOL—			
11	Meade-King, Robinson & Co.	M. Lub.	48,000	Baltimore
11	,, ..	,,	9,200	Philadel.
11	Worthington and Boler ..	,,	5,000	,,
11	Crew, Levick and Co. ..	,,	4,520	,,
11	,, ...	,,	26,300	,,
11	W. B. Dick and Co.. ..	Lub.	14,680	,,
11	Geo. B. Taylor	M Gr.	42,240	,,
12	W. B. Dick and Co. ..	Lub.	8,710	Baltimore
12	Burnaby and Chantrell ..	Lub. C.	670	New York
12	W. B. Dick and Co. ..	Lamp	3,860	,,
12	,, ...	Lub.	30,950	,,
14	Colby and Co.	,,	1,200	,,
14	Crew, Levick and Co. ..	M.Lub.	2,180	Philadel.
14	,, ...	,,	4,680	,,
14	Vacuum Oil Co.	Lub.	2,360	New York
14	Geo. B. Taylor	M.Lub.	30,800	,,
15	,, ..	,,	35,200	,,
15	W. B. Dick and Co. ..	Lub.	1,460	,,
15	Liverpool Storage Co. ..	,,	11,600	,,
15	A. Hulme	Resid.	10,000	Trieste
9	J. Light and Son	M.L.G.	400	New York
	BRISTOL—			
11	E. Stock and Sons	Lub.	85	Hamburg
12	W. Smith and Co.	,,	40,720	New York
12	,, ,, ..	Lamp	1,200	,,
12	H. Prichard and Co. ..	Lub.	630	Antwerp
12	Pickfords, Ltd.	M.Lub.	400	Hamburg
14	W. Smith and Co.	Lamp	2,000	New York
14	H. R. James and Sons ..	Lub.	4,400	,,
	HULL—			
9	Hull and Neths. S.S. Co. ..	Tar Oil	1,600	Rotterdam
11	Wilsons and N. E. Railway Shipping Co.	Lub.	1,200	Antwerp
11	,, ,, ..	,,	640	Hamburg
11	,, ,, ..	,,	480	,,

DATE.	PORT AND IMPORTERS.	DESCRIPTION.	NO. OF GALS.	PORT WHENCE.
May.	MANCHESTER—			
9	Liverpool Storage Co. ..	M.Lub.	20,085	New York
14	Meade-King, Robinson & Co.	M.Colza	7,120	Philadel.
14	,, ..	M.Lub.	17,000	,,
14	,, ..	,,	38,000	,,
	NEWCASTLE—			
12	Tyne-Tees S.S. Co... ..	M.Lub.	800	New York
	GLASGOW—			
9	Anchor Line	M.L.G.	3,000	New York
14	,, ..	M.Lub.	31,800	,,
14	,, ..	Colza Ill.	4,000	,,
15	Clyde Shipping Co... ..	M.L.G.	150	Antwerp
	GRANGEMOUTH—			
11	W. Graham Yooll and Co.	Lamp	2,000	Hamburg
	LEITH—			
9	W. Graham Yooll and Co.	Lamp	1,090	,,
9	Henderson and McIntosh ..	Lub.	18,000	Philadel.
9	,, ..	,,	30,200	,,
11	J. Currie and Co.	,,	1,900	Hamburg
11	W. Graham Yooll and Co.	Lamp	2,180	,,
	CORK—			
9	Palgrave, Murphy and Co..	Lub.	200	,,
	Total for Week		1,385,015	

FOR THE WEEK ENDED MAY 22ND, 1906—

DATE.	PORT AND IMPORTERS.	DESCRIPTION.	NO. OF GALS.	PORT WHENCE.
May.	LONDON—			
16	T. H. Lee	M.Lub.	520	Hamburg
16	Asiatic Petroleum Co. (Spondilus)	Benz.	675,800	Pulo Samboe
16	,, ,, ,,	,,	55,800	,,
16	Anglo-American Oil Co. ..	Lub.	12,000	New York
17	Schliemans Oil Co. ..	,,	1,500	Hamburg
18	H. Finkler and Co... ..	Resid.	9,850	Trieste
18	Union Lighterage Co. ..	M. Colza	4,000	Philadel.
19	J. W. Baker	Lub.	7,200	,,
19	W. Balchin	,,	5,000	,,
19	Mordaunt Bros.	,,	26,600	,,
19	London Oil Storage Co. ..	,,	1,850	Hamburg
19	Anglo-American Oil Co. ..	,,	87,200	Philadel.
19	Scott's Wharf	,,	4,000	New York
19	Homelight Oil Co. (Suram)	R.Lamp	1,298,080	Batoum
21	T. S. Harris and Co. ..	Lub.	1,000	Hamburg
21	G. W. Sheldon and Co. ..	Lub. Gr.	680	New York
21	,, ..	L.M.Gr.	400	Antwerp
21	W. Balchin	Lub.	7,600	Philadel.
21	Fielder, Hickman and Co...	,,	7,200	New York
21	W. B. Dick and Co. ..	,,	4,800	Philadel.
21	,, ...	,,	5,500	,,
22	London Oil Storage Co. ..	,,	280	Hamburg
22	Anglo-American Oil Co. ..	,,	16,000	New York
	LIVERPOOL—			
16	Penwarden and Jackson ..	M.Lub.	240	Antwerp
17	The Dee Oil Co.	,,	240	,,

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Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
May.				
17	George B. Taylor	M Lub.	56,800	Philadel.
17	,,	Mill Gr.	3,000	,,
18	W. B. Dick and Co.	Lub.	13,240	Baltimore
18	,,	,,	13,140	Philadel.
18	Meade-King, Robinson & Co.	M.Lub.	17,200	,,
18	Crew, Levick and Co.	,,	11,860	,,
18	Pickfords, Ltd.	,,	370	Hamburg
18	,,	M.L.P.	660	,,
19	George B. Taylor	M.Lub.	5,400	New York
19	Meade-King, Robinson & Co.	,,	14,000	Baltimore
19	E. Harrison and Co.	,,	18,000	,,
19	Vacuum Oil Co.	Lub.	5,600	Philadel.
21	W. B. Dick and Co.	Lub.	16,800	New York
21	Geo. B. Taylor	M.Lub.	14,000	,,
21	Burnaby and Chantrell	M.L Gr.	500	,,
21	W. Gibson and Sons	Lamp	2,050	Boston
	Bristol—			
19	Pickfords	Lub. P.	1,500	Hamburg
19	H. R. James and Sons	Lub.	800	New York
19	,,	,,	21,120	,,
19	,,	M.Colza	4,600	,,
21	W. Smith and Co.	Lub.	14,560	,,
21	,,	Lamp	3,600	,,
	Grimsby—			
15	J. Sutcliffe and Sons	Lub.	240	Antwerp
	Hull—			
17	Thos. Wilson, Sons and Co.	Lub.	8,360	New York
17	Hull & Netherlands S.S. Co.	Tar oil	2,080	Rotterdam
	Manchester—			
15	Liverpool Storage Co.	Lamp	2,520	Philadel.
15	Geo. B. Taylor	M.Lub.	160,680	,,
15	Liverpool Storage Co.	,,	8,530	,,
May.				
15	Crew, Levick Co.	M.Lub.	46,020	Philadel.
15	W. Hodgson and Co.	,,	8,400	Hamburg
16	J. T. Fletcher and Co.	,,	1,160	Antwerp
18	Worthington and Boler	,,	1,030	Philadel.
19	Diamond Lubricating Co.	,,	1,000	Hamburg
19	Geo. B. Taylor	,,	86,080	New York
21	Liverpool Storage Co.	,,	7,220	,,
21	,,	M.L.Gr.	820	,,
8	J. T. Fletcher and Co.	M.Lub.	10,400	Antwerp
	Middlesboro—			
15	E. H. Harris and Co.	,,	2,400	Antwerp
	Newcastle—			
16	Tyne-Tees S.S. Co.	,,	6,560	Hamburg
16	,,	,,	200	,,
17	Furness, Withey and Co.	M.Lub.	400	New York
19	Tyne-Tees S S. Co...	,,	11,360	Antwerp
21	C. Hassell and Son	,,	24,040	New York
21	,,	,,	13,960	,,
	Swansea—			
21	Burgess and Co.	,,	260	Hamburg
21	,,	Lub. P.	260	,,
	Glasgow—			
21	Clyde Shipping Co...	M.L.Gr.	240	Antwerp
	Belfast—			
26	G. Heyn and Sons	Lub.	240	Riga
	Cork—			
16	Cork Steamship Co.	Lamp	4,720	Rotterdam
22	J. Gough	Lub.	200	Hamburg
	Total for Week		2,881,460	
	Total for the past Fortnight		4,266,475	

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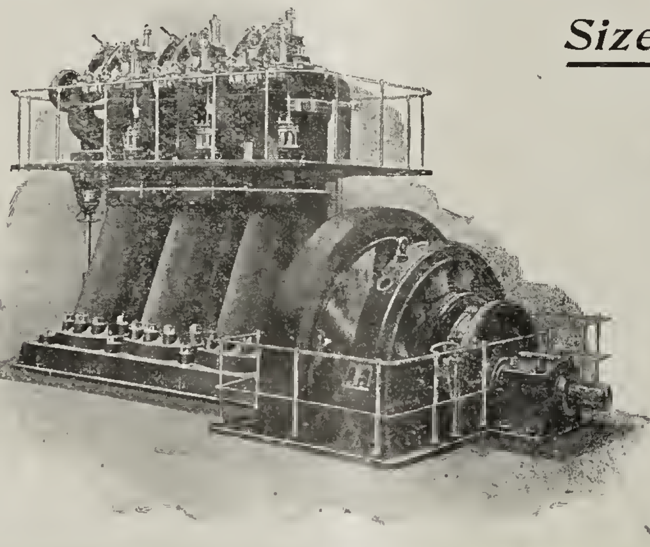

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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XIV. *(New Series.)* June 9th, 1906. No. 374.

Editorial Notes.

Russian and American Trade in Foreign Countries.

Messrs. Lane and Macandrew have just issued their annual statistical tables referring to American and Russian oil shipped to foreign countries for the year 1905, and, though perhaps these tabular records are somewhat later than usual in making their appearance, they are none the less very valuable. The tables are reproduced upon other pages of this issue, and they are in themselves so clear that comment is scarcely necessary. They shew that with regard to the petroleum trade of Batoum, the past year has witnessed a most unfortunate decrease in the amount of products exported, and no matter whether we look at the refined oil, lubricating, solar, distillate or crude, there has been an all-round shrinkage of a most substantial character, the same remark also applying to the exports from Novorossisk. As shewing the disastrous effect which the abnormal state of things has had upon Russia's petroleum trade with England, it will be seen that in no instance have the exports from Batoum suffered to so great an extent as those to the British Isles. This retrograde move, however, we are pleased to note, has now given place to more encouraging signs. The exports from America, on the other hand, display a most healthy tone, though it will be noted that in every case the figures given exclude Texas. The trend of the times is forcibly illustrated by the exports under the head of "naphtha," and the tendency for bulk shipments is proved by a most cursory glance at the figures.

Next Year's Petroleum Congress.

Those who take a keen interest in the welfare of the petroleum industry throughout the world, and who were disappointed that no International Petroleum Congress would take place this year during the State festivites in Roumania, will find much consolation in the annoucement—of a definite character – that the third international petroleum congress will take place at Bucarest fifteen months hence, in September, 1907. Though that time is still far ahead, the arrangements have advanced so far that an outline of a general nature has been agreed to, and with the nearer approach of the exact date, we may be sure that programme reflecting credit alike upon Roumania and the whole petroleum industry will be forthcoming. The Roumanian Government is greatly interesting itself in the congress, and this being so, it will naturally follow that nothing will be lacking to make the event worthy of the loyal support of everyone interested in the petroleum industry, no matter in what part of the world they be.

Continued Progress in Roumania.

Speaking of Roumania, we are reminded and very forcibly of the continued progress which is being made in the various petroliferous regions of the country, and as evidence of this, we have the great increase in the production during the first three months of this year, which approximately amounts to 40 per cent. In view of such great developments in the petroleum industry, it is no matter for surprise that the producers and refiners see the necessity for the formation of a thoroughly representative association which shall be run upon what one might call more practical lines than the organisation which has up to the present done much useful work. Re-organisation is, therefore, the order of the day, and from the latest reports to hand, matters are shaping themselves in a most satisfactory manner. The worthy president of the old association has shewn his enthusiasm for the proposal, and in order that the new organisation may be of the utmost value to the industry, it has been agreed that a leaf shall be taken from the book of the Naphtha Association of Baku. That there is considerable room for the operations of such a live association in Roumania, no one will for a moment doubt, nor are there any two questions as to its future success, provided its existence is legalised by the State.

The Russian Petroleum Co.'s Meeting.

Should the present high prices for Russian oil continue, should the production of the wells of the Russian Petroleum and Liquid Fuel Co. not only keep up to their present level, but increase to an extent of at least 25 per cent., and should no unforeseen trouble overtake the Russian petroleum trade, then there is some prospect for the company to make both ends meet, and have a little to spare. The above sentence sums up the hopes and aspirations of the chairman of the company, who, to the shareholders the other day, pictured the return of the prospects of the concern to their former brilliancy, if only——. Ah! there's the rub. We have been treated to such prophecies before, and they have been consistently held out until such time as the whole truth forced itself upon the minds of all. We have to admit that we were sorely disappointed with the defence of the directors as set before the shareholders through the medium of the Hon. Evelyn Hubbard. There was too much empty eloquence, which, of course, signified nothing. Under altered conditions, the prospects of the company would, we feel convinced, be brilliant, but what the shareholders are more concerned about is the present condition of their security—a condition which in its very best light is deplorable.

The Panama Pipe Line.

The article which we reproduce in this issue giving a number of important details relative to the Californian petroleum industry is particularly opportune, coming, as it does, at a time when speculation is rife as to the future of Californian oil upon the European markets. As we have pointed out in these columns already, the construction of the Union Oil Co.'s pipe line across the Isthmus of Panama opens Californian oil to the whole of the world's markets, and when tankers are able to load in the Mexican gulf with that State's oil at the same cost as carrying the Texas product, it is self evident that an enormous and constantly increasing trade will be rapidly built up. The Californian petroleum industry will thus become a great factor, inasmuch as its markets will in future be found in the four corners of the world. With one bound forward, the State's petroleum industry (which in years past, though growing in importance has concentrated its efforts in supplying the demand either at home or on the San Francisco coast), has been suddenly lifted from its position of comparative security to rank among the principal producing states in the world, and the interest, which, with the new regime will be centred in Californian progress, will be such that its importance cannot be over-estimated.

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THE ROUMANIAN PETROLEUM INDUSTRY IN THE FIRST QUARTER OF 1906.

The total production of crude oil in Roumania during the first quarter of 1906, according to official statistics, amounted to 179,885 tons, against 131,133 tons for the corresponding period of 1905, an increase of 37 per cent. The production was distributed among the different fields as under, as compared with that of the corresponding period of 1905:—

	1906.	1905.
Prahova District—		
Bustenari	113,407	88,649
Campina-Poiana	20,513	23,838
Moreni	24,952	4,098
Baicoi	6,560	413
Tinta	2,537	1,650
Other Fields in Prahova	2,055	968
Total for Prahova District..	170,024	119,616
Dambovitza District	4,585	6,495
Buzeu District..	2,919	2,717
Bacau	2,357	1,822
Total	179,885	130,650

The production of the leading firms during the first quarter of the year is given below:—

	1906.	1905.
Steaua Romana—		
Bustenari	27,715	25,407
Campina	16,632	19,207
Sarata	2,875	2,540
Moinesti	1,007	1,122
Baicoi..	6,167	21
Other Fields..	40	25
Total	54,436	48,322
Bustenari Co.	30,622	21,419
Telega Oil Co.	17,720	10,016
Campina-Moreni Co...	14,172	4,824
International Co.	10,304	10,709
Moreni Co.	8,280	—
Trajan Co.	5,699	6,359
Romano-American Co.	4,086	392
Arnheemsche Petroleum Co. ..	3,121	3,483
Aquila Franco-Romana	2,915	1,052
Grigorescu and Vladescu	2,721	3,858
Colombia Co.	2,685	962
Stanescu and Giuglescu	2,169	1,203
A. Van de Werk	1,130	1,877
Olandeza-Romana Co.	1,780	1,132
Eberhart, Marchena and Co. ..	979	33
Galo-Romana Co.	831	—
Riske, Popescu and Ionescu.. ..	796	677
Grigorescu and Stroe..	761	116
Louis Pasquier (Mercedes)	646	1,309
P. A. Naumescu	610	—

PETROLEUM IMPORTS INTO GERMANY DURING MARCH AND APRIL.

The imports of petroleum products into Germany in March and April were as follows (in tons):—

	March.	April.
Illuminating oil	57,330	47,843
Lubricating oil	15,445	16,352
Crude oil	2,261	1,423
Residuals	95	102
Crude benzine	7,177	6,209
Refined benzine & petroleum ether	479	823
Artificial turpentine and other mixtures..	64	127
Total	82,851	72,879

The exports of petroleum products from Germany were 1,088 tons in March and 1,986 tons in April. The products exported are chiefly lubricating oil and benzines.

The imports into Germany from the different producing countries during March and April were:—

	March.	April.
U.S.A.	60,730	49,905
Russia	9,725	8,629
Austria-Hungary	2,751	4,358
Dutch India	6,967	4,888
Roumania	1,036	1,527
Other countries or unknown origin	1,662	3,572
Total	82,851	72,879

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LONDON OIL SHARE MARKET.

Friday, June 8th.

Business in the Oil Share section of the London Stock Exchange continues in a state of suspended animation, quotations day after day being merely repetitions of previous figures. Since we last wrote, the wearisome 20-day account has been concluded, but the Whitsuntide Vacation followed swiftly, and the markets are still in holiday mood. At the carry-over on the 29th ult., the rate of interest charged for continuing oil shares to mid-June was about 6 per cent. to 7 per cent., but there was little business to be adjusted. A comparison of making up prices is fairly satisfactory, for during the period of 20 days Californian Oilfields rose $\frac{1}{16}$ at $5\frac{7}{16}$, Russian Ordinary 3d. at 13s., Preference 9d. at 13s. 6d, Schibaieff Ordinary 6d. at 9s. 6d., and Shell Transport Ordinary 2s. 6d. at 29s. The only decline was a fall of 3d. in Baku Preference at 7s. 6d., Baku Ordinary at 4s., Anglo-Russians at 2s., Schibaieff Preference at $3\frac{3}{4}$, and Spies at 8s. being without change.

On Saturday, May 26th, the following quotations ruled:—Anglo-Russians $\frac{1}{16}$-$\frac{1}{8}$, Assam Oil $\frac{5}{8}$-$\frac{7}{8}$, Baku Ordinary, 3s. 6d. to 4s., Preference 7s. to 8s., Bibi-Eybats $\frac{7}{16}$-$\frac{9}{16}$, Debentures 86-91, Californian Oilfields $5\frac{1}{4}$-$5\frac{3}{4}$, Californian Refineries $\frac{1}{8}$-$\frac{3}{8}$, European Petroleum Preference $\frac{1}{8}$-$\frac{1}{4}$, Debentures 85-90, Russian Ordinary 12s. to 13s, Preference 13s. to 14s., Debentures 89-92, Schibaieff Ordinary 9s. to 10s., Preference $3\frac{5}{8}$-$3\frac{7}{8}$, Shell Transport Ordinary 27s. 6d. to 28s. 6d., Preference $9\frac{1}{4}$-$9\frac{3}{4}$, and Spies $\frac{3}{8}$-$\frac{7}{16}$. No changes have been recorded since, with the exception of an advance of 1s. per share in Shell Transport Ordinary to 28s. 6d. to 29s. 6d, and of 3 per cent. in Russian Debentures, which have been in some little request, advancing from 89-92 to 91-93 on Friday last; to 91-94 on Tuesday; and to 92-95 on Wednesday. Dealing has taken place in Assam Oil and Spies, but has not been of sufficient importance to alter quotations.

◆

Baku Production.—The production of crude oil at the Baku oil fields during the first 15 days of May amounted to 18,949,427 poods.

Very Gratifying.—Messrs. Mantascheff and Co. have resumed negotiations with their workmen for the re-starting of their case oil works at Batoum.

The Roumanian Jubilee Fetes and the Petroleum Industry.

* * * *

The Producers Present a Memorandum to King Charles.

Upon the occasion of the fêtes now being held in Roumania to celebrate the 40th anniversary of the reign of His Majesty King Charles, the first King of Roumania, the Roumanian Association of the Petroleum Producers and Refiners has presented the respectful congratulations of its members and their expressions of gratitude and devotion to His Majesty.

On the 26th of May the association was received in the throne room by their Majesties the King and Queen, surrounded by the Royal Family and court dignitaries. Mr. C. Alimanestianu, the president, introduced to the King the members of the association, and handed to His Majesty a memorandum shewing the progress made by the petroleum industry during the 40 years of His Majesty's reign.

Their Majesties conversed most graciously with the gentlemen introduced to them, and evinced a keen interest in the petroleum industry. Upon the invitation of Mr. Alimanestianu, Princess Marie expressed a desire to visit the oil fields in company with her son Prince Charles, for which the members of the association expressed their gratitude.

King Charles the First of Roumania.

Among the gentlemen who took part in this reception were:—Mr. Alimanestianu, president of the association; Mr. George Boamba and Mr. G. Stefanescu, vice-presidents; L. Witte, general manager of the Aurora Co., and also representing the International Co.; A. Radovici and M. Schapira, representing the petroleum concerns controlled by the Disconto-Bleichroeder group; E. Saladin, of the Aquila Franco-Romana Co.; J. Boamba and G. Spies, of the Steaua Romana; M. Zentler, manager of the Aurora Co.; N. Coucou-Starostescu and H. Nenitzescu, representing the Dambovitza Co.; Messrs. Chamberlain and Page, of the Romano-American Co.; Professor L. Mrazec, Lewis Hamilton, N. Ozinga, Emil Baum, Seceleanu Bros., H. C. Williams, and M. Mancas, Secretary of the association.

The President invited representatives of all other petroleum firms to take part in the function, but many of these were prevented attending either by absence from the country or illness, among the latter being Mr. Schlawe, the chief representative in Roumania of the Disconto - Bleichroeder group.

In the address presented to the King, the representatives of the petroleum industry dwelt upon the great progress achieved during the past forty years, and continued:—

For anyone who will attempt to write the history of the progress accomplished by the Roumanian people, the period of forty years beginning from 1866, constitutes a page of light and grandeur without parallel until this day in the past history of the Roumanian race.

The figures, dry but eloquent, which shew the measure of the prosperity attained during that interval by Roumania in the direction of economic progress and enlightenment, are, and will be, unperishing proofs of what the genius and activity of the Roumanian people could produce under the wise direction of King Charles the First.

The petroleum industry, for which, we have reason to believe, fate reserves a great future in the development of the labouring forces of Roumania, has also had an important and durable development during the period from 1866 to 1906.

The following are some comparative figures relating to the petroleum industry in 1866 and the beginning of 1906:—

	1866.	1906.
Production	6,425 tons	615,244 tons
Number of hand wells.	680	1,132 abandoned, 113 in sinking, 680 productive.
Number of boreholes..	2 abandoned	222 abandoned, 215 in sinking, 340 productive
Exports of crude oil ..	3,267 tons..	49.515 tons (including gas oil)
Exports of illum. oil ..	927 tons	164,833 tons
Total exports in quantity	4,194	214,348
Total exports in value	3,485,021 francs	14,466,970 francs
Number of refineries	8	72
Length of pipe lines ..	Nil ..	400 kilometres
No. of tank waggons..	Nil ..	about 1,500
No. of producing firms	23	,, 92
No. of workmen	about 950..	,, 8,000
Capital invested	8,000,000 francs..	,, 150,000,000 fcs.

In this list there could not be tabulated in a comparative manner the technological study of our petroleum oils, nor the geological investigation of the petroleum formations, which extend over the surface and in the sub-soil of Roumania, investigations which have been carried on in a thorough manner, beyond comparison with those in 1866.

It has not been even possible to compare either the capacity of the tanks, of the export installations, or the commencement of the commercial organisation, for in 1866 these formidable instruments of progress were not dreamt of.

The impulse given in these days to the petroleum industry is important, and if it is true that we have still much to do in order to arrive there where the aspirations of a national work methodically carried out impel us to, our confidence of success to be accomplished is unshakable under the guidance of your Majesty and the well-beloved dynasty.

The Petroleum Producers' and Refiners' Association, in the name of one of the most considerable assets of the sub-soil of Roumania, is proud of the progress realised by the Roumanian petroleum industry, a progress which was revealed to the whole world on the occasion of the Liége Exhibition of 1905, lays at the foot of the throne the tribute of its deep gratitude and proof of its love for your Majesty and for the dynasty, for the high and powerful support given to the efforts made with a view to turning to account these riches, during the forty years of a wise and glorious reign.

May God give your Majesty long years of health and satisfaction. (Here follow the signatures.)

His Majesty King Charles and Princess Marie have expressed to the representatives of the petroleum industry their deep conviction that the industry will have a very great future in Roumania, and that petroleum will in the future play a greater part in the world's commerce.

THE ROUMANIAN PETROLEUM ASSOCIATION.

The recent great development of the Roumanian petroleum industry in all its branches has created the need for a representative association of petroleum producers and refiners on more practical lines than the existing organisation. At the invitation of the president —Mr. Alimanestianu—a meeting of the association was held on the 31st of May to consider the question of modifying the statutes of the association to meet the present and probable further requirements of the petroleum industry.

At that meeting the view was unanimously expressed that a firmly organised association, in which all firms would be represented, had become an absolute necessity.

Mr. George Spies, general manager of the Steaua Romana, in a warm speech, recommended the re-organisation of the association on the lines of the petroleum association at Baku, which levies a tax on the producers in proportion to their production, maintains hospitals, schools, roads and other institutions for the common use of the industry, collects statistics and information about the industry, defends the interests of the industry as a whole before the Government in the matter of taxation, railway transport, export facilities, etc. In Russia the law compels all producers to belong to the association and contribute to its funds. There being no such law in Roumania the producers and refiners ought to voluntarily agree to contribute to a common fund. He estimated that an annual revenue of from 200,000 to 300,000 francs would be required, and pledged his company to support such an institution, if agreed to by the other firms.

The proposal was very warmly approved by all present, including Mr. Alimanestianu, the president; Mr. M. Schapira, of the Bustenari Co.; Mr. Saladin, of the Aquila Franco-Romana; Mr. Herzog, of the Trajan Co., and others.

Mr. Alimanestianu expressed the view that at present the Roumanian petroleum industry was not sufficiently prosperous to be able to support heavy charges. The big companies had not yet had time to attain that degree of financial success which they were destined to have, whilst the small producers had still to struggle for existence. He stated, by the way, that his opinion was that Roumania would reach its level of prosperity, which he puts down at an average 10 per cent. return on capital, when the large firms would decide to restrict their operations to purchasing and storing of crude oil, refining, transporting and marketing the products, leaving the actual production of the crude in the hands of the smaller firms. He suggested that the levies of the association should be divided into general and district imposts. The general tax should be for the general expenses of the Association, which we estimated for the first year at 40,000 to 50,000 francs, and the other for local needs, such as the present urgent need for a hospital at Bustenari, for which purpose a rate should be levied on the firms interested in the particular district.

With the unanimous consent of all present, Mr. Alimanestianu decided to call another meeting to decide upon the necessary notifications in the statutes of the association, and the amount of the tax per ton to be imposed.

This second meeting was held on the 1st of June, when the subject was further advanced. The Government will be asked for their support in giving the new association a juridical existence.

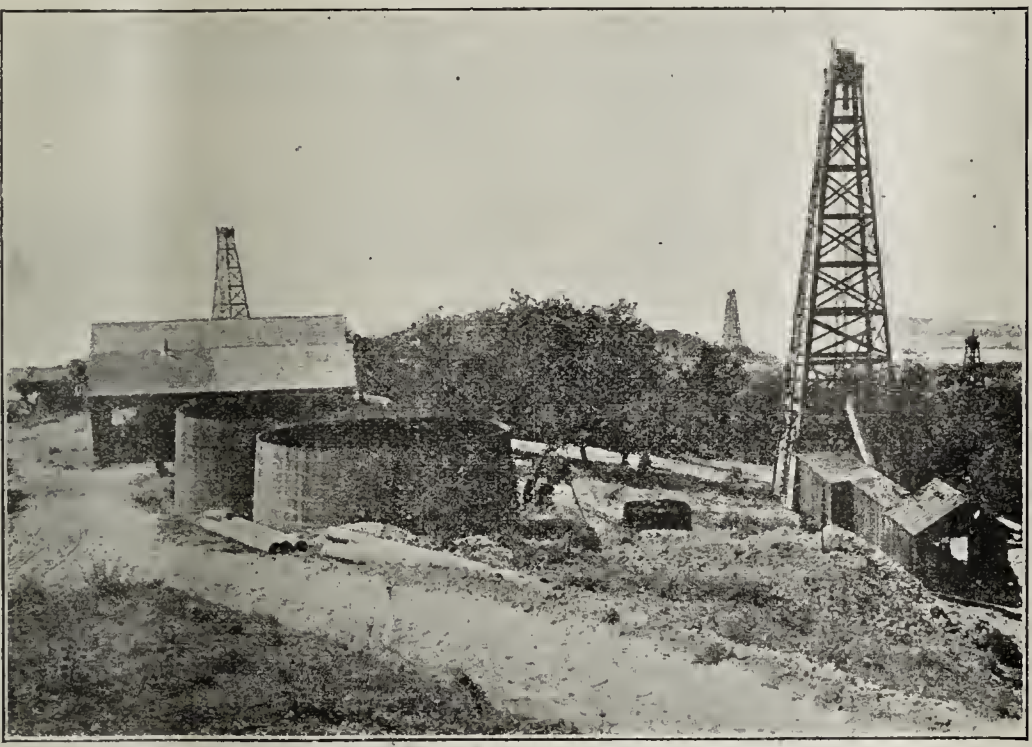
A meeting of representatives of firms interested in the Bustenari oil field was also held on the 1st of June, to fix on the contributions to be made by the various firms for the construction of a hospital at Bustenari. It was resolved to await the re-organisation of the petroleum association, in order that the matter might be dealt with by the association.

CALIFORNIAN OIL FOR THE EUROPEAN MARKETS. - -

The Union Oil Company and the Panama Pipe Line.

Fresh from his recent visit to California, Mr. Holland S. Reavis, of the *Oil Investors' Journal*, has furnished the American press with a most interesting account of the petroleum industry of California, paying particular attention to the Union Oil Co. and its plans. From recent issues of the Petroleum Review our readers will ere this have made themselves thoroughly acquainted with the significance of the project which the Union Oil Co. of California is about to carry out, and which has for its object the extension of the markets for the Californian oil, consequent upon the operation of the pipe line across the Isthmus of Panama.

Inasmuch as hitherto the trade in Californian oil has chiefly been confined to the Pacific coast, little attention has been centred by oil men outside California upon that country's petroleum industry, but now that the oil is to be upon the Atlantic coast and the European markets, the State's petroleum trade will take a pronounced leap forward. This will be accomplished by piping Californian oil across the Isthmus of Panama, and it is the construction of 50 miles of eight-inch pipe line from the city of Panama on the Pacific, to Colon on the Atlantic, that is bringing the California industry in close touch with the industry upon the Atlantic side of the American continent.



A Corner of the Union Oil Company's Property.

In the history of petroleum there has been no project or achievement, says Mr. Reavis, embodying as much of the elements of business daring and originality as the Panama pipe line. Although it will be only 50 miles long from end to end, it will make possible the economical transportation of California oil to points along the Atlantic seaboard in both North and South America, and to Europe. It will cost no more to ship petroleum in tank steamers and barges from Colon to the north, south and east than it does to ship it from Port Arthur or Sabine.

Credit for the conception and working out of the Panama pipe line proposition belongs to Mr. John Baker, Jr., manager of the manufacturing, sales and marine departments of the Union Oil Co. of California, which is building the line, and president of the Union Steamship Co. Nearly three years ago Mr. Baker, who was impressed with the need of wider markets for the product of California fields, suggested the plan to put the Western oil into the Eastern markets by transporting it to Panama in vessels, piping it to the Atlantic side and reshipping it. The officers of the company were not inclined to take the suggestion seriously, but Mr. Baker did not give up the idea and finally won the older directors over to his way of thinking. He made a thorough canvass of the oil markets of the world, including Europe and South America. On this trip he covered 52,000 miles. As a result of his report to the directors it was determined to proceed at once with the Panama proposition. Mr. Baker had obtained concessions for pipe-line rights of way outside of the canal zone from the Government of Panama, and when he went to Washington he convinced the President in a very short time of the practicability of the scheme. In consideration of the payment of $500 a month to the public schools of the canal zone and the furnishing of fuel oil to the Panama railroad and for other Government uses at 90 cents a barrel (delivered), the Co. received a permit from the United States Government to lay its line across the isthmus, and one of the conditions imposed in the agreement was that the line should be completed and in operation by August 1st of this year. While the Panama pipe line is vital to the the Union Oil Co.'s plans for the extension of its success of market, it is, in itself, but a small link in the whole scheme. The distance from the terminus of the company's main shipping point, Port Hartford, to Panama is approximately 3,000 miles. To transport the oil from Port Hartford to Panama, and from the other end of the line to the points of destination, would require a large fleet of oil-carrying vessels. As the company obligated itself to have the pipe line in operation by August 1st, 1905, there was not sufficient time to permit the construction of new boats, so it bought all the tank steamers not owned by its competitors, and purchased two large steamers which are being converted into oil carriers at the Newport News shipyard. Three vessels which have been in the Texas oil trade, namely, the "Lansing," of 48,000 barrels capacity; the "Washtenaw," of 30,000 barrels capacity; and the "Roma," of 28,000 barrels capacity, were among those bought by the Union people.

As an indication of the scope of the company's plans, it may be stated that the directors contemplate an outlay of $15,000,000 on transportation facilities and equipment in the next five years. Specifications have been prepared for three tank steamers, which, when completed, will be the largest vessels of their type in the world. Each is to have a capacity of 100,000 barrels, and the cost of each will be not less than $1,000,000. It is understood that one of the big tankers will be built on the Pacific coast and the other two on the Atlantic coast.

In expanding its markets the Union Oil Co. is endeavouring, first of all, to create new consumption—to put in oil as fuel where coal is being used. It is the company's purpose to enlarge its business by extending the use of fuel oil. In pursuance of this policy it has made contracts to deliver crude oil in Chili, 4,650 miles south of San Francisco, for a term of ten years. It will take a tank steamer two months to make the round trip from Port Hartford to Chili. But the Union Oil Co. will get 67½ cents. a barrel for the oil on board vessels at Port Hartford, as compared with 37½ cents delivered to consumers in San Francisco. The oil that goes to Chili will replace coal—very expensive coal. The market for fuel oil, at excellent prices, in the countries of South America, is practically unlimited. The only problem involved in supplying these markets is transportation.

The Union Oil Co. has already made contracts for the delivery of oil on five-year contracts, beginning in October next, and January, 1907, to Atlantic coast points at prices which will net a far better return than any business to be obtained in California. Part of its scheme is to supply independent refineries along the Atlantic seaboard with the better grade of California crude, reserving for its own disposition the gas oil, asphaltum and residuum for liquid fuel. Undoubtedly it will eventually have its own refinery on the Eastern seaboard. Its vessels will deliver California oil to Europe, and, in the course of time, to Japan and China.

It is in the plan of the Union Oil Co. to increase its fleet until it is in position to build up a large business in the Orient in the sales of both crude and refined oil. The company's refinery at Oleum, on San Francisco Bay, is working to its full capacity, turning out kerosene, gasolene, engine distillate, asphaltum and other products. The plant is now running about 70,000 barrels a month of crude. Recently the sum of $500,000 was voted by the directors of the company to be used in immediately enlarging the refinery. Twenty 600-barrel stills have been ordered, of which 10 are now on the ground. The stills are arranged in units, so that the fullest benefits of the increased capacity may be obtained while the additions are being made.

The Union Oil Co.'s property at Oleum comprises 192 acres. The wharf is 950 feet long, and is T-shaped at both ends, giving the greatest possible loading capacity. Both the Southern Pacific and Santa Fe have spur tracks into the property.

Without a vast quantity of oil on top of the ground or the assurance of an abundant supply on its various properties, the Union Oil Co. could not undertake the extension of its business that is contemplated. According to the best information obtainable the company has not more than 1,000,000 barrels of oil in storage. Its policy is to carry a certain percentage of its contract requirements in reserve, and to produce the bulk of the oil as it is needed. In this way it avoids the expense of building an immense amount of steel or earthen storage. Its present sales or deliveries amount to upwards of 10,000 barrels daily. It has made contracts which will bring its total business up to 26,000 barrels a day next year. Practically all of the oil needed to fill its contracts will come from the wells of the company. As readers of the Review know, its holdings comprise 175,000 acres, scattered through all the proven fields of California. Less than 20,000 acres are held under lease, the balance being owned in fee simple. The principal holdings are in the Santa Maria district in Santa Barbara county, where it has 80,000 acres, and in Ventura county, where it has 40,000 acres. The balance is distributed through the other nine counties, in which oil is being produced or is known to exist. It is stated that 77,000 acres of the Santa Barbara county holdings cost the company an average price of less than $16 an acre.

In April the company completed the purchase of what is known as the Newlove estate in the Santa Maria district, embracing 3,300 acres, regarded as the cream of the oil field. The option was obtained on the 10th of the month, and the purchase was closed in less than two weeks. The price was above $1,250,000. To pay for the property the company issued 8,000 shares of its treasury stock, all of which was taken by the present shareholders at $164, netting $1,312,000.

The tests made by the Union Oil Co. in the Santa Maria field shew the existence of a very rich oil formation. Four wells, located four miles apart in almost a straight line, developed productive sands, and in one, which was drilled to a depth of 3,600 feet, it is understood that the drill penetrated 1,100 feet of oil sand. The Hartnell gusher, brought in by the Union Oil Co. in December, 1904, has produced more than 2,200,000 barrels of oil. It made as much as 15,000 barrels of oil in one day, and for months its yield was 8,000 barrels daily. It is reported as still flowing, in diminished quantity, by heads.

Until recently the Union Co. operated 21 strings of drilling tools, spending from $80,000 to $100,000 a month in development. It is now running 17 strings of tools. As the new wells are completed they are capped, and will remain shut in until their output is needed. An officer of the company is authority for the statement that the capacity of the wells thus held in reserve is not less than 30,000 barrels a day, and that a complete test might shew double this quantity.

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The Pipe Line Difficulty.—A report from Batoum, dated the 26th May, states that in view of the irregular working of the pipe line, the refiners have petitioned the railway administration to improve the service, and prompt settlement of the difficulty is now promised. At the time of writing, there had been no deliveries from the pipe line station at Batoum for eight days. The arrivals of kerosene from Baku from May 1st to May 13th (o.s.) did not exceed 47,000 poods.

The Petroleum Sands of Greene County, Pennsylvania.

IDENTIFYING THE VARIOUS OIL STRATA OF THE FIELD.

The United States Geological Survey has recently completed a report of much practical value, inasmuch as it has been compiled in order to correct serious errors into which oil drillers in that region have fallen in the past in the matter of identifying the various strata of the field. The report states that the Gordon sand was first discovered in south-western Pennsylvania, in a well on the Gordon farm, near Washington, drilled in August, 1885. This well lies in the Washington oil field, which for several years produced large quantities of oil from the Gantz, fifty-foot and Gordon horizons. The Gantz well in that field penetrated the Gordon sand 2,416 feet below the surface, or 244 feet below the top of the Gantz sand. During subsequent drilling, both these horizons, and also the Fifty-foot sand were traced from Washington into eastern Washington and Greene counties, and the names given at Washington came to be used over large areas in western Pennsylvania.

Thus it happened that when operations were commenced in the Nineveh field, in western Greene county, the names Gordon and Fourth were applied to sands which were then supposed to be equivalent to the beds bearing those names at Washington. In the Richhill gas field, several miles south-west of Nineveh, and occasionally in the Nineveh oil district, the name "Nineveh" sand has sometimes been used for the sand called Gordon at Nineveh. The name Nineveh is said to have been first used by John Worthington, and it seems to be the most appropriate name for this sand, which lies 75 to 100 feet above the true Gordon sand, and 100 feet below the top of the Fifty-foot sand. This name has been used by most of the drillers of the Natural Gas Co., of West Virginia, in the Richhill field. In some other parts of western Greene country, in particular by certain drillers, the names Nineveh and Gordon have been correctly used. Such is true of a majority of the wells in Wayne township, and of a few in Center, Morris, and Springhill townships.

Throughout the Nineveh, Bristoria and New Freeport oil fields, extending from Nineveh south-westward to Higbee, and then southward to the West Virginia line, south of Deep Valley, however, the name "Gordon" has been more generally given to the Nineveh sand. The term "Fourth sand" has generally been applied to the true Gordon sand, and the name "Gordon Stray," when not used for the Nineveh, has designated any bed a short distance above what the drillers considered the Gordon sand.

The only published intimation of a possible mistake in correlation of these sands is a statement by I. C. White, in which he expressed some doubt on the subject, as follows:—

"The oil sand struck at 2,935 feet in the Smith well, 2,049 feet below the Pittsburg coal by Mr. Worthington, in July, 1888, was identified by him as the Gordon sand of Washington county to the north, and has ever since been so designated by the oil fraternity, having proved productive of oil and gas in a nearly continuous belt from Nineveh south-westward into Wetzel and other counties of West Virginia for a distance of 50 to 60 miles or more.

"Mr. Worthington and others, including the writer, have sometimes thought it possible that this very productive horizon of the New Freeport district in Greene county might not represent the Gordon sand of Washington, but possibly the 'Thirty-foot' sand between it and the 'Fifty-foot horizon.' But this inference is formed only upon the lessened interval (2,050 feet instead of 2,100 feet) between the sand in question, and the Pittsburg coal, but as this interval is but 50 feet less than at Washington, and is the same as it is in Butler county, between the Pittsburg coal and the great Third oil sand of the Butler, Armstrong, Clarion, and other producing fields of the Venango sand region to the north-east, it appears quite probable that the original identification as given in 1 5 is correct. At any rate, it is the nomenclature universally used by the oil-producing interests in Greene, Wetzel, Marshall, Tyler, and Doddridge counties."

To I. C. White, therefore, belongs the credit of having first questioned in print the correllation. The evidence collected by the present writer, and given as follows, may be regarded as decisive proof of the correct relations.

In studying the underground stratigraphy of Washington and Greene counties, a great number of well records have been plotted on a uniform scale, and placed side by side with the various persistent horizons, such as the Pittsburg coal and Big Injun sands, in agreement. The principal datum horizon of the region and the one used by all drillers in measuring to the various sands is the Pittsburgh coal, which lies from 300 to 1,300 feet below the mouth of the well. Other beds which are easily recognised are the Little Lime and Big Lime, the Big Injun sand, and the various beds of red shale.

In studying the wells with a view to tracing the sands, a line of wells was taken, beginning at the original Gantz well, near the Gordon well in Washington, and extending southward to the Fonner field, and thence to all parts of western Greene county. In this tracing the Gordon sand was found to maintain its interestal of 150 to 200 feet below the top of the Fifty-foot sand, and to lie below the sand hitherto called "Gordon" in the Nineveh oil field. In the Gantz well the Nineveh sand is not recorded, but in the Baker well, near Lone Pine, mid-way between Washington and the Greene county line, the sand occurs 102 feet below the top of the Fifty-foot sand. In that region, and very frequently throughout eastern Washington county, the name Gordon Stray has been applied to the sand at this horizon. In the Baker well the sand attains an unusual thickness. South of this well the next good section in line is that of the Fonner No. 2. In this well the Nineveh sand consists of 13 feet of red sand lying below the top of the Fifty-foot, and a second red rock occurring 68 feet below it, and a few feet above the Gordon sand. The John Lewis well, 2·2 miles north of Nineveh, offers the next complete record, and this is the farthest well north-east, in which the mistake in correllation is known to have been made. The term Gordon has been used by the drillers to designate the Nineveh sand. From the Lewis well this sand can be traced almost continuously the entire length of the oil district, being known in this county either as "Gordon" or "Gordon Stray."

The accuracy of the tracing is facilitated by several red shales and other beds associated with the sands. The most important of these is a thin red bed, which generally lies directly below the Nineveh sand. Sometimes, as in the Fonner well, the Nineveh sand itself is red. This horizon is not always red, but the colour occurs so frequently that when carefully correllated there is little danger of making a permanent mistake in identifying the Nineveh sand over any considerable area. This horizon is regarded as the top of a series of red beds recognised beneath large areas in western Pennsylvania, and known to geologists as the Catskill beds, which attain a maximum thickness of 200 to 300 feet in eastern Greene and Washington counties, but die out towards the west, so that in western Greene county the horizon is marked only by the bed of red shale mentioned above, and occasionally by one or two other thin red beds. The western limit of the Catskill beds, therefore, can be said to correspond approximately with the western boundary of the State of Pennsylvania.

A second horizon of red shale—not one of the Catskill beds, but one which assists in correllation—is a bed which lies between the Thirty-foot and Gantz (or Fifty-foot) sands, and which occurs rather extensively in western Greene and Washington counties, and to the north-west. Towards the east it dies out. This fact was recognised by John F. Carll, in the seventh report on the oil and gas fields of Pennsylvania, and he published a map shewing the distribution of this bed, and tracing it beneath the counties of Forest, southern Venango, and western Butler, in Pennsylvania, and in eastern Ohio, as far west as its outcrop along the Cincinnati anticline. By Carll the bed was provisionally correllated with one of the Bedford shales of Ohio. Since Carll's report was issued, considerable drilling has been done in Washington and Greene counties, and the red shale is here found to be present considerably outside his south-eastern boundary for it. In western Greene county this bed occurs from 30 to 80 feet above the top of the Fifty-foot sand, and helps in the identification of this sand.

In Washington and Greene counties several sandstone horizons occur within the limits of the rocks designated as Catskill. These are generally not persistent over wide areas, owing to the fact that by nature they are lentils in the Catskill formation, dying out toward the east. The Gordon Stray, Gordon and Fourth sands are such beds, and do not seem to be persistent. The next lower bed, or Fifth sand, and the next higher sand, the Nineveh, are much more regular, and can be traced for great distances.

The interval of the Nineveh sand from the Pittsburg coal run from 1,997 to 2,121 feet, and the distances of the Gordon sand from the coal vary between 2,023 feet and 2,287 feet. The figures for the Nineveh sand and their averages are given by townships in the following table:—

	Least Interval. Feet.	Greatest Interval. Feet.	Average Interval. Feet.
Morris	2,028	2,110	2,055
Richhill	1,997	2,054	2,036
Center	2,005	2,120	2,039
Jackson	2,024	2,065	2,044
Aleppo	2,018	2,098	2,056
Wayne	2,033	2,045	2,039
Gilmore	2,065	2,113	2,089
Springhill..	2,033	2,121	2,052
General Average ..	—	—	2,051

THE AMERICAN PIPE-LINE REPORT FOR APRIL.

The statistics published in the *Oil City Derrick* shew that both the runs and shipments of Pennsylvanian oil for April recorded small gains over those of March, while another increase was recorded in the pipe-line stocks. This increase, however, was considerably below that of the previous month, and amounted to less than 2,300 barrels daily. During the month the Trenton Rock fields likewise shewed gains in the runs and shipments, but there was a decline in the stocks of nearly 27,000 barrels per day. In the Mid-Continental fields stocks have been increasing at a remarkable rate during the last few months, and at the close of April they amounted to 17,000,000 barrels, or over 3,000,000 barrels more than the combined stocks of the Pennsylvanian and Trenton Rock fields.

The average daily runs and shipments of the Pennsylvanian and Trenton Rock fields during the first four months of this year were as under:—

RUNS.

	Pennsylvania.	Buckeye.	Total.
January	71,740	43,072	114,812
February	69,949	41,067	111,016
March	73,213	38,994	112,207
April	73,415	39,912	113,327

SHIPMENTS.

	Pennsylvania.	Buckeye.	Total.
January	76.589	64,044	140,633
February	74,471	67,480	141,951
March	70,642	70,689	141,331
April	71,279	74,885	146,164

PATENTS.

Applications for Patents and Patent Applications recently published relating to the Petroleum Industry.

Specially contributed by Messrs. EDWARD EVANS & Co., of 27, Chancery Lane, London, W.C., and 105, Colmore Row, Birmingham, Consulting Engineers, Chartered Patent Agents and Enrolled Patent Attorneys of the United States.

Application Filed in Great Britain.

Process of Bleaching Oils and Fats.—Herman August Metz and Philip S. Clarkson, London. No. 11983 of 1906.

Applications Published in Great Britain.

Improvement in the Refining of Petroleum and Mineral Oils.—Thomas Macalpine, Chiswick, Middlesex; John Frederick Simmance, Hammersmith, Middlesex; and Jacques Abady, Hampstead. No. 11893 of 1905.

This relates to a treatment for refining mineral oils, consisting in first neutralising the acid of the oil; secondly, treating the oil to render its impurities susceptible to oxidation; and, thirdly, treating the oil with dilute sulphuric acid in presence of an oxidising agent, and preferably bringing the whole to rapid boiling.

Improvement in Apparatus and Method of Extracting Oil and fatty Matters from Substances containing them.—Ernest Ridgill, Sheffield. No. 15231 of 1905.

This relates to an apparatus for extracting oil or fatty matters from any substances, and consists of five principal parts—a cylindrical digester for containing the material to be operated upon, a cylindrical still to receive the oil or fatty matters extracted, and two cylinders, each containing two refrigerators and a reservoir, to hold the agent employed.

Improvements in and Relating to the Distillation and Oxidation of Wood Tars and Resin Oils.—Hugo Noerdlinger, Floersheim-on-the-Maine, Germany. No. 8590A of 1905.

This relates to a process of distilling wood tars and resin oils of all kinds, such as beech-wood tar, birch-wood tar, and copal oil, consisting in heating the said tars or oils to a temperature of from 120° to 200° C., and simultaneonsly subjecting them to the action of a current of air, oxygen, or oxonised air, until the residual products in the still is soluble in dilute alkali.

United States Application.

Oil Can.—George A. Harcourt. No. 820784.

This relates to an oil can and liquid receptacle, and consists in the combination with the can body having a suitable top and orifice therein, of a reversed saucer-shaped deflecting plate located below the orifice and suitably supported, and an open support secured to the centre of the top of the deflecting plate immediately below the orifice.

AMERICAN PATENTS GRANTED.

Still.—Zion E. Fiveash, Rawles Springs, Miss.

The combination with an upright tubular body having a top, a bottom, and a partition dividing the interior of said body into a lower steam-chest, and an upper retort-chamber, said retort-chamber having doorways located just above the partition doors for closing the doorways, perforated steampipes extending longitudinally through the retort-chamber, and having inlet ends communicating with the steam-chest, a steam-supply pipe connected to said steam-chest, an outlet-pipe connected with the retort-chamber, a condenser connected to the pipe, and an endless conveyor operating through the retort-chamber upon the partition, and through the doorways.

Oil-Well Pump.—Robert E. Bole, Bakersfield, Cal.

In a pump, the combination with a plunger, of a cylinder which consists of an outer casing, a series of lining-sections in said casing fitted to each other, and to the exterior of the plunger but having external dimensions such as to leave a space between them and the outer casing, the parts being constructed to permit fluid to flow into and out of said space, and a filling of fusible material which when molten can be introduced into or allowed to run from said space.

THE RUSSIAN PETROLEUM AND LIQUID FUEL COMPANY, LTD.

ANNUAL MEETING OF SHAREHOLDERS.

The ninth annual meeting of shareholders of the Russian Petroleum and Liquid Fuel Co., Ltd., was held at Winchester House on Tuesday week, the Hon. Evelyn Hubbard, chairman of the company, presiding over a large attendance.

In moving the adoption of the report and accounts, the Chairman dealt at first with the disastrous effects of the recent riots, and said that the fact that their property escaped almost total destruction was due to the unflinching attitude maintained by the managers and staff on the oil fields. The speaker had been to Baku, he had seen the office with its walls pitted with bullets, and he rejoiced to know that the firm stand made by their officials in Baku had not failed in its effect.

Speaking more particularly with regard to the accounts, the Chairman said he noticed there were one or two items mentioned that had caused adverse comment. One or two shareholders had written to the directors suggesting that they might recognise the advisability in sharing in the misfortunes of the company. He desired to say that his colleagues and himself recognised that, and as soon as the fire of last year occurred, the directors decided that they should reduce their fees for the year by one half, so that under that heading for the present year there would be considerable reduction. As to the figures of the secretary's and clerks' salaries, that looked large against that of the previous year, but it was accounted for by the fact that in 1904 they were in alliance with the Baku Co., and a certain portion of the expenses were paid by that concern, but now, owing to the termination of the agreement with the Baku Co., their company had to pay the whole of the expenses themselves. The directors, however, were fully alive to the urgent necessity there was for reducing charges for working expenses as much as possible both in London and Baku, and for the present year he believed they would be able to shew a great reduction, and that the present £11,000 would come down to something like £6,000.

He had personally felt that it was incumbent upon him to make himself acquainted on the spot with the actual state of affairs in Russia, and so he had recently made an extended visit, having had the opportunity of meeting and establishing good personal relations with the heads of the two great companies—he referred to Messrs. Nobel Bros. and the Mazoot Co.—with which their concern was now allied for the purposes of distribution in Russia. Those firms had met them in a most courteous and friendly way throughout the negotiations resulting from their inability to deliver the full proportion of their refined products that was due under their agreement. The operations of those two companies were of such magnitude that in combination with them he was sure their company could obtain results which they could never hope for by themselves, and he believed the directors would be able to shew proof of this during the current year. Prices, as they knew, had ruled abnormally high for the last six months at Baku owing to the shortage, and, while the corresponding figure was not always obtainable for mazoot in a few places where it came into competition with other forms of fuel, the average was calculated to work out at the parity of the Baku price. Kerosene, on the other hand, was realising in the interior prices considerably in excess of the Baku value, and in view of the general shortage of stocks and the inevitable delay in working the production of oil back to its former level, their managers were of opinion that they might look for a continuance of very remunerative prices for the products both for 1906 and 1907.

Coming to the vital question of production, he had gone carefully into that matter while upon the fields, and the result of the investigation he made with the assistance of their managers was distinctly reassuring. Without pledging himself to the absolute accuracy he might explain that at the existing price of 25 copecs for crude oil, all expenses of production, all their estimated debenture interest and some £80,000 depreciation were covered by a gross weekly output of about 240,000 poods. The week before he reached Baku they attained a figure of 60,000 poods in excess of that, and for the past eight weeks their production had averaged close on 300,000 poods. A satisfactory feature of the position was the fact that over 200,000 poods were being supplied by their wells on the older strata, where constant pumping was steadily reducing the water that had hampered them ever since the strikes. A not less satisfactory feature was the great success of the first new well, No. 62, which they had carried down to the fresh stratum at 310 fathoms, which, overflowing two or three times a day, had been giving a regular addition of some 10,000 poods daily and had set at rest any doubt as to the richness of that hitherto unexploited source. They would remember that when the directors last met the shareholders they could only hold out the hope that they had a good stratum below. They had now tested it, and had every reason to believe it would prove an extremely rich source. If that calculation were correct, it was evident that no question as to any exhaustion of the oil-producing qualities of their property could be raised again for many years to come. The one thing needed was that they should be replaced in possession of adequate working capital. That then brought him to the financial part of the question, and he thought that the financial scheme which would have to be carried out would involve not only the issue of further debentures, but also the readjustment of relative rights of the preference and ordinary shareholders. The board, however, would take their principal shareholders into their confidence in settling the details of the scheme, and he thought that he could promise that the first right to subscribe for the proposed issue would be reserved for their own shareholders. They were not to be asked to subscribe to any visionary scheme: they all knew the capabilities of their property, and what it had done in the past, that it could do again. If prices held good, a production of 300,000 poods per week would enable them to earn the preference dividend twice over during the current year, after paying all interest charges and depreciation, while with a production of some 400,000 poods per week, their prospects would be restored to their former brilliancy. He then moved the adoption of the report and balance sheet, a motion which was seconded by Mr. Ogilvy.

Mr. Peacock said he thought the present was a most inopportune time to raise further capital, when their ordinary shares were standing at only 13s., and the preference at very little more. He had noted the optimistic views which their chairman had put before the shareholders, but though he hoped they would be fulfilled, he reminded the shareholders that they had heard such expectations before.

The Chairman replied that, with respect to the new issue, nobody regretted more than the directors themselves, and they had done their best to avert the evil day so long. They had carried a considerable load of debt for a long time, but they thought it better to face their difficulties now than drag along the debt any further. As to the cost of the new issue, the shareholders would recognise the fact that the conditions of the Stock Exchange were not favourable, and the company would have to pay pretty dearly for the money they had to raise. He could only say that if any gentleman who represented any particular school and enjoyed the confidence of the shareholders was nominated for the committee, the board would be only too pleased to have his assistance.

A Mr. Howell asked with respect to the suggested reorganisation of the company if it were not a fact that the first debenture holders had a prior right.

The Chairman: They have of course a general lien over all the assets of the company.

Mr. Howell: And nothing could be done without their consent?

The Chairman: That is a legal point, but I think the preference shareholders will also have something to say on the matter.

Mr. George Tweedy then rose to address the meeting, but the Chairman immediately interrupted, stating that he was not sure whether the shareholders desired to hear this gentleman.

The question then went to the meeting, and, upon a show of hands and amid much applause, the Chairman agreed that the majority were in favour of Mr. Tweedy's being heard.

Mr. Tweedy then directed his criticism to the balance sheet and the report, contending that they had been drawn up so as to give those who did not understand the business the impression that during the year a profit of about £15,000 had been made. This, however, was not the truth, for after taking into account the carry forward last year, the loss was about £30,000, even though less than one-half the usual depreciation had been allowed. The loss in production was stated to have been as a result of the damage done by the riots and incendiarism in August last, but if the shareholders looked at the firm's production prior to that time, they would see that it had decreased to a far greater extent than any of the other neighbouring properties, and so the riots had nothing whatever to do with the decrease, at least not to the extent they had been led to believe. It was a well-known fact that the properties were being badly mismanaged, and unless this was remedied, the shareholders would be faced with more disasters in the future.

After other criticism, the report and balance sheet were adopted, and on the motion of the Chairman it was agreed to authorise the board to borrow a sum not exceeding £350,000, in addition to the amount already authorised.

MISCELLANEA.

THE DRAINING OF BEBE-AIBAT BAY.

AN IMPORTANT COMPETITION.

The executive committee for the reclamation of a portion of Bebe-Aibat Bay, in the port of Baku, for the exploitation of petroleum has announced an international competition for the preparation of a project and estimate for the draining operations, with the proper strengthening of the seashore and the erection of the necessary works for the safe entrance and berthing of vessels.

The total quantity of earth which is required to be filled in is about 15,000,000 cubic metres, distributed over an area of 2,600,000 square metres of the bay, and with a maximum depth of the latter of six metres, while the length of the shore line to be strengthed is about 4,000 metres.

Projects and estimates are to be submitted to the executive committee not later than next October. For projects, which will be approved by the jury, three premiums are provided: the first of 10,000 roubles, the second of 8,000 roubles, and the third of 5,000 roubles. The executive committee further reserve to themselves the right to acquire one or more of the projects submitted, which have failed to secure the prizes, by the payment of 2,000 roubles for each.

Persons wishing to take part in the competition can obtain further particulars by applying by letter or telegraph to the executive committee. The address for letters is: The Executive Committee for the Reclamation of a portion of Bebe-Aibat Bay for the Exploitation of Petroleum, Baku; and the telegraphic address is: "Ikbeb," Baku.

INCREASE IN THE BULK OIL TRADE OF INDIA.

According to the *Times of India* ten additional oil tank waggons have recently been ordered from England for the bulk oil traffic over the East Indian Railway. These ten wagons, together with the ten just previously ordered, will raise the number of these special vehicles to fifty-five. After the Eastern Bengal State Railway, which carries about or nearly 150,000 tons kerosene oil per annum, the East Indian Railway conveys most, between 80,000 and 90,000 tons, from which they obtain a revenue of some nine lakhs of rupees. The bulk oil trade has been largely on the increase; and there are few important railway stations, especially now on the East Indian line itself which have not bulk installations.

THE PETROLEUM INDUSTRY IN WIETZE.

The number of petroleum firms in the Clausthal mining district, where Wietze is situated, in the first quarter of the current year, shews a decline against the corresponding period of 1905, from 29 to 27. The decrease is due to the dissolution of two firms through lack of capital, which prevented their extending operations. The majority of the working plots (22) are in the Luneburg region, but four are in the Hildesheim district. The output of crude oil has also declined. In the first quarter of the current year only 14,282 tons were produced, against 17,349 tons in the first quarter of 1905, a decline of nearly 18 per cent. The decline must be attributed to the fact that the larger firms have now accumulated very considerable stocks, a result of the low prices which prevailed on the market, which only began to improve last autumn. This also explains the fact that the sales of crude oil have increased very largely, from 4,231 tons in the first quarter of 1905, to 20,992 tons in the first quarter of 1905. The present remunerative prices have infused fresh life into the Wietze oil industry, the stocks are now being cleared away, and the raising of oil and opening up of new lands is proceeding with increased energy. It is interesting to note that the refineries at Wietze are now treating a large part of the local crude oil output on the spot.

PETROLEUM IMPORTS INTO YOKOHAMA.

According to the monthly report of the Yokohama Chamber of Commerce, 2,226,274 gallons of petroleum were imported into that port during March, as against 1,108,690 gallons for the corresponding month last year The value of the kerosene imports so far this year has been 804,081 yen, and the total quantity for the three months was 3,762,877 gallons.

CONDITIONS IN THE CALIFORNIAN OIL FIELDS.

The most recent dispatches from California go to prove that the general oil situation is practically unchanged, and on the authority of the Producers' Association it is said that the demand for oil from the State approximates about 2,750,000 barrels per month. The Gracioso Oil Co., with which is associated the Californian Refineries, Ltd., are proceeding with the piping and refining plans for handling their Santa Barbara production, while it is rumoured that a number of other investments of outside capital are in prospect, a fact which cannot but be considered as highly satisfactory. In consequence of the recent earthquake, the *Los Angeles Express* anticipates a largely-increased demand for oil fuel in California in the future, as in the rebuilding of the business places and manufacturing concerns, the advantages of liquid fuel will be taken into consideration. It is now admitted by the majority of those interested in the State's oil industry, that little or no damage was done either to the producing fields or the various refineries.

OPERATIONS IN THE GROSNY OIL FIELDS.

DETAILS FOR 1905.

According to the statistics of the respective firms operating at Grosny, the output of the various producing plots in the Grosny oil fields in 1905 was as follows: –

No. of plot.	Owners.	Production in poods.	Number of producing wells.
22	Akhverdoff Co.	10,300,000	3
977	,, ,, ...	5,839.500	13
Unnumbered	Anglo-Russian Maximoff Co.	5,395,000	17
163	Spies Co.	2,848,495	12
15	,, ,, ...	2,050,980	15
165	North Caucasian Oilfields, Ltd.	2,015,109	9
Unnumbered	Akhverdoff Co.	1,734,900	6
23	,, ,, ...	1,441,100	6
32	Spies Co.	1,389,890	5
24	Akhverdoff Co.	1,300.000	6
10	Russian Standard ..	984,806	10
42	James MacGarvey ..	960,826	1
13	Tcheleken-Daghestan Co.	781,248	6
26	Caspian & Black Sea Soc.	765 400	2
28	Grosny Oil Co.	630,609	1
12	Kasbeck Syndicate, Ltd...	624.157	5
Unnumbered	Moscow Co.	595,850	7
16	Spies Co.	519,355	9
976	St. Petersburg Co. ..	451,700	10
975	Akhverdoff Co.	440,900	9
169	Kasbeck Syndicate ..	320,694	3
25	Akhverdoff Co.	303.400	3
11	Tcheleken-Daghestan Co.	204,225	3
19	Spies Co.	167,315	1
166	Kholodovsky	161,908	2
39	Kasbeck Syndicate ..	147,425	1
27	Grosny Oil Co.	145,182	1
25	Russian Standard ..	84,940	1
168	Vladicaucasian Co. ..	74,545	2
41	Russian Standard ..	22,244	1
13	Grosny Oil Co.	19,000	1
8	Alkhan-Yurt Co... ..	800	1

Altogether on 32 plots there was obtained from 172 wells (of which 18 produced less than 20,000 poods each), 43,057,052 poods, as against 40,095,331 poods produced in 1904. The production by spouters was 12,453,335 poods, to which two wells on plot No. 22 contributed 9,194,500 poods. The actual production was somewhat higher than the figures given above, as the output of the spouting well No. 3 on plot No. 163, which was on fire, could not be estimated accurately.

The results for 1905 must be considered as highly satisfactory, taking into account the two strikes, the depressing effect of the general disturbed condition of Russia, etc. With the usual number of working plots, and with a certain increase in activity on the plots which were idle or worked to a slight extent, the output might have been larger, possibly not far off 60,000,000 poods.

The production for the first quarter of 1906 has not yet been made public, but is believed to have been in excess of the figure for the first quarter of last year. The spouters on plot No. 22 continue to work at long intervals. In March a periodical spouter was resumed from well No. 38 on the Ermoloff plot of the Akhverdoff Co., which began to spout first in 1903. The same firm has also a spouter from well No. 70 on plot No. 25, but, although creating much noise, yields little oil. The two small spouters on plots No. 32 and 163, however, continue to act. The well on plot No. 42 of Mr. James MacGarvey has ceased to spout, and is now worked with an air compressor. On plot No. 15 belonging to the Executors of Maximoff, Nos. 7 and 8 of the Alkhan-Yurt Co., No. 40 of Mr. Glieboff and No. 37 of Mr. Klein, exploitation work has not yet commenced. Boring operations have been started on the Baratoff plot, on the extreme west of the oil fields, by the North Caucasian Co.

AUSTRIAN PETROLEUM EXPORTS.

The Actiengesellschaft füer Oesterreichische und Ungarische Mineraloel Producte (commonly called "Olex"), the export organisation of the Austria-Hungarian refiners cartel, completed its financial year on April 30th. The report of the company's operations in the past year shews satisfactory results in connection with the efforts made to develop the export of Austrian petroleum.

In 1905, the company exported to Switzerland 7,245 tons of oil. Of Russian oil, Switzerland imported 6,843 tons in 1905 as against 11,655 tons in 1904, while Roumania exported to Switzerland in 1905 only 1,782 tons of oil.

The sale of Austrian oil in Germany is restricted to a few markets; yet in spite of this, the exports of the "Olex" to Germany increased considerably. During the first two months of 1904 the export of Austrian petroleum products to Germany amounted to 8,655 tons; in the same period of 1905 it increased to 12,465 tons; and in the course of the two months of 1906 it went up to 16,580 tons. A further increase in the Austrian petroleum exports to Germany during the current year is assured by the stipulation in the new commercial treaty for reduced rates for Austrian petroleum on the Prussian and Saxon railways. Thus the rate for the entire distance from Drohobycz to Danzig is now 21·90 marks per ton, as against a former 47·80 marks; Drohobycz-Berlin 20·40 marks, as against 37·50 marks; Trzebinia-Dresden 11·60 marks, as against 19·60 marks; and Mahrisch-Ostrau to Leipsic 13·40 marks, against 23·50 marks. With a view of taking advantage of the favourable trade conditions in Saxony, the "Olex" has recently established a subsidiary company called the "Sächsische Petroleum Import Gesellschaft," which is now erecting large tank installations in Dresden and Riesa, and smaller depôts in a number of other places. It has also been decided to establish a similar concern for operations in the Eastern Provinces of Germany. With a view to improving its position in Central and West Germany, the "Olex" has bought up all the remaining shares of the two companies formed by it in Mainz and Dusseldorf, which it had not in its possession before.

Sales for the new season have commenced in the form of large contracts for future deliveries at improved prices. As has been already announced, "Olex" has sold to the German State railways about 16,000 tons of petroleum products. Lately the Bavarian railways began to make more stringent demands in regard to the quality of Austrian petroleum. The Saxon railways having invited tenders for the supply of petroleum oils, and the tender of "Olex" being the lowest, there is hope that a large part of the contract will be secured by it.

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{5}{8}$-$\frac{3}{4}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	3/6-4/0
,, ,, ..	£650,000 $5\frac{1}{2}$% Pref.	£1	7/3-7/9
Bibi-Eybat Petroleum Co. ..			10/0-11/0
Californian Oilfields	£250,000 Ord.	£1	$5\frac{3}{8}$-$5\frac{5}{8}$
European Petroleum.. ..	£550,000 Pref.	£1	2/6-3/6
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	85-90
Russian Pet. & Liquid Fuel ..	£500,000 $6\frac{1}{2}$% Pref.	£1	13/0-14/0
,, ,, ...	£600,000 Ord.	£1	12/0-13/0
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	$3\frac{3}{4}$-4
,, ,, ...	£575,000 Ord.	£1	9/6-10/6
Shell Transport & Trading ..	£2,000,000	£1	28/6-29/6
,, ,, ,, ..	£1,000,000 Pref.	£10	$9\frac{3}{8}$-$9\frac{5}{8}$
Spies Petroleum Company ..	£312,500	10s.	8/0-8/6

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on June 2nd. Lowest Roubles.	Quotations on June 2nd. Highest Roubles.
Baku Naphtha Co.	100	624	628
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	4,050	4,150
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	167	170
Neft Co.	250	—	—
Nobel Bros.	5,000	8,600	8,700
,, ,, ...	250	—	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

SCOTCH COMPANIES.

Supplied by Messrs. MACLEAN AND HENDERSON, STIRLING.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. $8\frac{1}{2}$ pd	£199,750	£10	$17\frac{5}{8}$
Do. 6% Cum. Pref. ..	£100,000	£10	$12\frac{5}{16}$
Burmah Oil, Ord.	£1,100,000	£1	54s. 6d.
Do. Pref.	£250 000	£1	25s. 6d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	$8\frac{1}{4}$
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	$17\frac{1}{2}$
Do. New (£8 10s. pd.)	£131,750	£10	18
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	88s. 0d.
Do. 6% Cum. Pref.	£100,000	£10	$12\frac{3}{8}$
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	30
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	68s 0d.
Do. "B" Deb...	£150,000	£100	$152\frac{1}{4}$

DUTCH COMPANIES.

Company.	Quotations May 29th.	Quotations May 15th.	Florins.
Arnhemsche Petroleum Mij. ..	77	80	1,000
Aurora ,, ,, (Deb. 5%)	$90\frac{3}{4}$	$90\frac{3}{4}$	—
Campina Poiana Mij...	35	35	—
Dordtsche Petroleum Mij. (Pref.) ..	126	122	500
,, ,, ,, (Deb. $4\frac{1}{2}$%)	$102\frac{3}{4}$	$102\frac{3}{4}$	1,000
Elzasser Petroleum Mij.	$2\frac{7}{16}$	$2\frac{1}{4}$	1,000
Gaboes ,, ,, ...	$19\frac{3}{4}$	$19\frac{3}{4}$	—
Holl. Rumeensche Petroleum Mij...	$32\frac{1}{2}$–$33\frac{1}{2}$	26-$28\frac{1}{2}$	1,000
Int. Rum. Pet. Mij.	$88\frac{3}{8}$	$88\frac{3}{4}$	500
Java Petroleum Mij. (Ord.) ..	30	30	1,000
,, ,, ,, (Pref.) ..	42	$42\frac{3}{4}$	—
Koninklyke Nederl. Pet. Mij. Shares	$479\frac{1}{2}$–$481\frac{1}{2}$	480–487	250-1,000
,, ,, Share certificates	480	478–482	1,000
Mœara Enim Petroleum Mij. ..	115	$114\frac{1}{2}$–115	100
,, ,, 1-1,000 Oblig. 5	102	102	250-1,000
"Moesi Ilir" Petroleum Mij. ..	$34\frac{5}{8}$	$34\frac{7}{8}$	—
Nederl.-Rumeensche Petroleum Mij.	17	$17\frac{1}{2}$	—
Nieuwe Ned. Petroleum Mij. And...	$55\frac{1}{4}$	$55\frac{1}{4}$	1,000
Oliebronnen in Hannover Mij. ..	173	170	—
,, ,, (Deb. 5 %)	$100\frac{1}{2}$	$100\frac{1}{2}$	—
Panolan Maatschappij Cert. ..	340	340	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	$123\frac{3}{4}$	$143\frac{7}{8}$	1,000
,, ,, (Common) ..	$99\frac{1}{4}$	97 x.d.	—
Sumatra-Palembang Petroleum Mij	62	61	500
Zuid Perlak Petrol. Mij. (Pref.) ..	$88\frac{1}{4}$	$84\frac{1}{2}$	—

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6 ,, ,, ,, 6 ,, ,,
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THE
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SATURDAY, JUNE 9TH, 1906.

ARE MONOPOLIES A DISADVANTAGE?

NEVER was there a time like the present when public attention was to such a great extent directed to enquiring into the working of monopolistic enterprises, in an endeavour to discover the effect of their operations upon the trade and commerce of a nation, and the welfare of the populace at large, whether it be for good or ill, and inasmuch as the subject is one which is to a striking degree associated with the petrolem industry, it is absolutely essential that we should boldly speak out upon this controversial question.

In this age we are so apt to look upon things superficially, and to come to conclusions based upon half statements and half truths, that it is the exception and not the rule to carefully view facts in the naked light of experience. Consequently, it comes to us as no surprise to find that public opinion views any and every kind of monopoly with a great amount of suspicion.

We doubt if there is any branch of commerce wherein monopoly has played so important a part as in the petroleum industry, and therefore we feel it our duty to give a few facts upon this question. Our mind naturally turns to America—the home of the Standard Oil Company—for it is to this continent that we first look for an answer to the question of, "Are trade monopolies disadvantageous?" It has long been recognised among those who take an intelligent interest in the subject, that the progress of the American petroleum industry is due almost solely to the very fact that in its midst there sprung up just at the critical moment an amalgamation of interests—a monopoly if you will—which sought irregardless of expenditure to make the petroleum industry of that country an important factor in commerce, and now, thanks to its operations, American oil enjoys a distinction which is envied throughout the civilised world. In the far removed fields of Kansas and Indian territory, as well as in others more accessibly situated, the oil wells are connected with pipe lines whose aggregate length would more than encircle the whole world, and the small operator, no matter where he be, now finds an immense organisation ready, yea, and willing to give him every assistance in order that he may be able not only to speedily remove his oil to the refineries, but that he may have the wherewithal to drill for more. Therefore, is it to be wondered at that under the guidance of such an enterprise—a monopolistic enterprise— as the Standard Oil Co.—the American petroleum industry has risen to occupy such an important place in Transatlantic commerce?

To-day, we venture to assert, it is readily admitted that the very essence of industrial success is organisation —not an organisation of an unthinking and fragmentary character, but an organisation that takes into account every requirement and possibility—an organisation that searches out, as the Standard Co. has done, the best and most economic means to the end to be attained and knows through and by what means it can be reached. Here it is that we recognise the secret of the wonderful rise and growth of that world-wide concern—the Standard Oil Co.—and if monopoly is to be conducted upon such lines, than we in the name of all that is helpful to the development of commerce, welcome the many advantages which it brings. Evidently, however, Commissioner Garfield of America has different views, for he would seek to destroy any organisation which for the benefit of mankind, seeks to cheapen an article of universal use, for he plainly lays it down in the voluminous report recently issued, that owing to such a perfect combination as that which the Standard possesses, it is impossible for a small man to compete at the price. Therefore, he argues, this is contrary to the concensus of opinion as to the lines within which a country's commerce should be limited. We would only say that Commissioner Garfield has yet much to learn in connection with the general principles of trade, for he is fighting his present battle on behalf of a mere handful of refiners, and taking little or no notice of the ten thousand producers who are comfortably and profitably carrying on their business through the medium of the Standard Oil Co.

But apart from the combination of which we have already spoken, there are two other kinds of monopolies which command attention. The one is that which seeks to monopolise simply in order to "corner" any commercial article, and, therefore, aims at increasing its price to the consumer, rather than that he should be allowed to buy at the lowest possible figure. Such a monopoly is working upon lines contrary to the spirit of the age, and for its existence we have not one single word to say. The sooner it lives only on the pages of commercial history, the better it will be for the community at large.

The other monopoly against which we would protest is that of the Governmental order, and it is a strange coincidence indeed, that in connection with the petroleum industry we should have both the good and bad. To-day the Russian petroleum industry groans under Government monopoly, which has quite openly sought to strangle it. We see it in the exorbitant freight rates which the Government charges for the carriage of oil over its railways, we see it in the taxes which are thrown upon various petroleum products, and in the heavy royalties which are exacted from petroleum producers who attempt to turn the Government lands into good account, and lastly, we see it in the extortionate tariff demanded for the use of the pipe line from the centre of the petroleum industry to the port of shipment.

Let us take the latter case and compare it with America. In Russia, the Government charges 19 copecs per pood (or 2 cents. per gallon) for oil passing through the Baku-Batoum pipe line, a distance of roughly 600 miles, but through the organisation of the Standard in America oil is piped a considerably greater distance for one half of a cent. per gallon. Other and just as flagrant instances could be cited to shew to what an extent the present Government monopoly is hindering the proper development of the Russian petroleum industry, but it is pleasing to us to find that the Russian producers are now within measureable distance of the prevalence of a more congenial state of things. That country possesses all the qualifications for a great and profitable success; but one thing she lacks, and that is the genius of organisation in the hands of capable people. We use the term genius because nothing less than genius could organise such an industry upon lines which would push forward its development to its fullest legitimate extent. If only the Russian petroleum industry had possessed an organisation like that of the Standard Oil Co., ever ready and willing to give its money and valuable experience to develop its vast mineral riches, rather than live as it does in constant fear under a Governmental monopoly which seeks to render impossible those economies so essential for its welfare, its position to-day would have been totally different. A healthier tone would have been prevalent throughout the several branches, and contentment would exist in the place of chaos and disorder.

There are, as we have said, monopolies which stand as monuments to the credit of the commerce of any country, yet on the other hand there are, unfortunately, those of which little that is good can be said.

THE BAKU PETROLEUM ASSOCIATION.

ANNUAL MEETING.

The first sitting of the 22nd annual meeting of the members of the Baku Petroleum Association took place on the 21st of May, at Baku, M. Rugevitch, chief of the Caucasian Mining District, being in the chair.

The first question considered was the proposal to exclude from the royalties on production paid to the treasury, a certain per centage as allowance for water and mud mixed with the oil, and it was eventually resolved to deduct, in calculating the royalty, the percentage of water and mud actually found in the oil by tests made in each case of average samples.

At the second sitting, which took place on the 23rd ult., an animated discussion arose upon the question of the leasing out of plots in Bebe-Aibat Bay for boring purposes. One side grouped round Messrs. Pappe, Vatchianz, and Tagianossoff, urged, for the purpose of increasing the production and reducing the price of crude oil, the desirability of permitting borings to be started on the shore plots without waiting for the solution of the general question of the draining of the bay. Others headed by Messrs. Gukassoff, Ogulevitch, and Feigl, taking their stand on the principle of equal rights for all, protested against the proposal to drill immediately. Mr. Lianosoff suggested that a decision on the question should be deferred till the next meeting in November when the scheme for draining the bay would be ready, and it would be more easy to decide whether immediate drilling was desirable. This suggestion, however, was negatived, and in the main proposal to drill immediately being put to the vote, it was lost by 22 votes against 10.

The question of increasing the number of members on the council of the association and generally of improving the methods of carrying on the business of the association was then discussed, and it was resolved to appoint a committee, who would prepare a report on the subject for the November meeting.

At the third sitting of the Conference, the question of fire protection at the oil fields was considered. A proposal of the technical committee that all crude oil reservoirs should be covered with a protecting covering of stone, concrete and bricks, was rejected, owing to heavy cost and doubtful efficacy of the same. The same fate overtook a proposal by a committee for the compulsory provision in spouting wells of appliances to draw off the oil, in case of fire. It was pointed out by speakers that such appliances did not exist, and it was, therefore, impossible to make such a proposal practical. The third proposal of the committee for compelling firms at Bebe-Aibat to cover their derricks with fireproof materials was adopted.

On the question of apportioning the levy per pood, a committee was elected, and another committee was appointed on the question of extending the levy to firms engaged in enterprises auxiliary to the petroleum industry, such as water works, gas works, electric power, etc.

At the fourth sitting a report of the tank waggon allotment committee was read, in which it was proposed that, in view of the undefined condition of the industry, to retain this committee for the present, but to petition the Government to abolish it as soon as it becomes necessary. Messrs. Ter Akopoff, Feigl and others suggested that the association should abolish the committee at once, but Messrs. Gukassoff and Lianosoff concurred with the views of the committee's report, which was eventually adopted by the meeting.

The report of the technical committee for the testing of petroleum oil was then read. Mr. Kvitko declared himself against the proposal of the Ministry of Finance to abolish the technical committee, and transfer its duties to the excise officers. Mr. Lianosoff advocated the necessity of retaining the committee, as in the case of misunderstanding with the excise department, it was essential to have an independent body to fall back on. Mr. Djunkovsky, representative of the Viceroy, agreed with this view. Mr. Guchman pointed to the special need for independent laboratory tests in view of the complicated nature of the regulations for levying excise duty on lubricating and similar oils, introduced by the law of 1st April, 1905. The meeting eventually unanimously resolved to petition the Government to retain the technical committee for testing oils.

At the following sitting the question of introducing a town governorship at Baku was considered in regard to the modifications introduced into the scheme since its adoption at the last meeting of the association.

The discussion opened with a speech by Mr. Tagianossoff, who examined in detail the proposed modifications, and asked whether it was advisable for the association to contribute 600,000 roubles per annum, if such deviations from the original scheme were adopted, as the formation of two councils of the town governor instead of one, and the elimination of the representation of the workmen, not to speak of the depriving of the association of the right to revise the composition of the town administration.

Mr. Djunkovsky, the representative of the Viceroy explained the meaning of the changes introduced, shewing that the formation of two councils was necessary for making their labours more fruitful.

After some further discussion, a committee was elected to study the question and report to the conference. On the committee were elected Messrs. Ogulevitch Gukassof, Lianosoff, Kinazeff, Pappe, Tagianossoff, and Khatissoff. At the request of the conference, Mr. D. Djunkovsky agreed to act as chairman of the committee.

At the sixth sitting the proposal of the mining department *re* certain changes governing the leasing out of Government petroliferous lands, was considered. The department proposed:—

(1) To reduce the period between the announcement of auctions, and holding of same, from six to three months, which the meeting agrees to; (2) To introduce mixed auctions; and (3) To empower the Ministry of Commerce to reduce, by agreement with the State Comptroller and the Viceroy of the Caucasus, the minimum obligatory production, in accordance with the productivity of the plots Mr. Lianosoff opposed the proposal, and suggested a minimum obligatory production to introduce an obligatory amount of drilling, to be done in the form of a minimum number of sagenes, and the meeting accepted this.

NEXT YEAR'S ROUMANIAN PETROLEUM CONGRESS.

The Roumanian delegates, by agreement with the delegates of other countries and with the Roumanian Government, have decided that the next International Petroleum Congress shall be held in September, 1907, in Bucarest. The congress will be organised by the Roumanian Government with the help of the Liége Delegates, and of the Association of Petroleum Producers and Refiners of Roumania. The Roumanian Government will issue official invitations to the congress, and we understand that vast preparations are already in progress for the reception of members of the congress, whose deliberations promise to be of absorbing interest. Prof. Mrazec the eminent Roumanian geologist has recently paid a visit to Galicia, in connection with the forthcoming petroleum congress.

* * *

ROUMANIAN PETROLEUM EXPORTS IN APRIL.

The following are the official statistics of exports of petroleum products from Roumania in April, 1906 (in tons) :—

Destination.	Crude oil, distillate, gas oil, etc.	Illum. oil.	Benzine.	Total.
Austria-Hungary ..	988	—	—	988
Bulgaria	142	5	15	162
France	—	—	3,099	3,099
Germany	140	1,811	1,985	3,936
Italy	8	2,020	—	2,028
Switzerland	13	—	—	13
Turkey	95	1,288	—	1,383
Total in April, 1906..	1,385	5,124	5,099	11,609
„ „ 1905..	3,564	9,662	5,310	18,536

* * *

THE PROGRESS OF THE SHALLOW SAND DEVELOPMENTS AT HUMBLE.

We have referred in our past few issues to the development of the shallow sand in the Humble field, and the latest information now to hand goes to shew that most active operations are being carried on in this connection. In fact, our contemporary, the *Oil Investors' Journal*, contends that the degree of activity which is now being experienced in shallow sand work equals, if not surpasses, the rush for the deeper strata in the early days of the field, while the amount of work compares favourably with any previous record in the history of oil field development in the Gulf Coast region. During the first half of May no less than 27 wells were completed, of which 21 were brought in producers, yielding a gross output of nearly 3,000 barrels. The estimated total production is now 12,300 barrels daily, more than one-half of which is being obtained from the shallow sand. The production at Humble, therefore, is on the increase, and when compared with the total yield at the end of April an increase of nearly 2,000 barrels daily is recorded. At the middle of the month no less than 40 wells were being drilled, 35 of which were destined for the first sand.

* * *

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 7th June, 1906, as follows:—

The tin plate market is still unsettled owing to the violent fluctuations in the price of tin, which since our last report has dropped about £10 per ton, and tin plates are consequently a little easier. This week nearly all the mills in South Wales are closed down in accordance with the recent arrangement between the manufacturers and their employés, the object being to restrict production. We make prices to-day as under :—

IC	18¾×14	124 sheets	110 lbs.	13/6 per box.
IC	19½×14	120 „	110 „	13/6 „
IC	20 ×10	225 „	156 „	19/0 „

F.o.b. Wales. Tin lining and iron hooping extra.

* * *

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended May 26th was 256,000 poods, or 4,127 tons; and for the week ended June 2nd was 263,000 poods or 4,240 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended May 27th was 283,000 poods, or 4,563 tons; and for the week ended June 3rd was 298,000 poods or 4,804 tons.

Spies Petroleum Co., Ltd.—The output for the week ended May 27th was 128,875 poods, or 2,078 tons. The output for the week ended June 3rd was 139,085 poods, or 2,243 tons.

The European Petroleum Co., Ltd.—The production for the week ended May 27th, 1906, was 93,035 poods, or 1,500 tons; and for the week ended June 3rd was 98,254 poods or 1,584 tons.

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO JUNE 5th, 1906.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since May 22.	From Jan. 1.	Since May 22.	From Jan. 1.	Since May 22.	From Jan 1.	Since May 22.	From Jan. 1.	Since May 22.	From Jan. 1.	Since May 22.	From Jan. 1.	Since May 22.	From Jan. 1.	Since May 22.	From Jan. 1.
Austria ...	—	874,560	18,020	354,770	8,080	48,930	—	—	—	—	—	—	—	—	26,080	1,289,260
Belgium ...	—	240	15,520	208,820	—	11,000	—	—	—	5,300	—	—	—	1,416	15,520	215,776
Borneo ...	—	210	—	—	—	—	—	—	—	2,580,750	—	240	—	—	—	2,581,200
Canada ...	—	—	—	8,000	—	20,000	—	—	—	—	—	—	—	—	—	28,000
Germany ...	3,490	2,016,950	68,360	671,060	—	—	—	—	—	2,320	—	—	—	5,890	71,850	2,706,700
Holland ...	4,840	9,740	240	1,160	—	—	—	—	—	1,080,910	—	271,000	1,600	28,120	6,680	1,390,450
Roumania ...	—	1,360,000	—	—	—	—	—	1,035,550	—	—	—	—	—	—	—	2,395,550
Russia ...	823,850	14,985,890	174,510	988,310	—	—	—	1,604,250	—	—	—	—	—	5,660	988,360	17,584,110
Sumatra, &c	—	—	—	—	—	—	—	—	—	976,500	—	—	—	—	—	976,500
U.S.A. ...	9,897,480	43,879,557	1,175,260	21,446,429	—	523,328	4,842,570	23,171,520	—	4,636,380	2,544,850	9,047,730	4,800	440,980	18,464,960	103,135,834
Other Countries	—	1,370	150	11,620	—	—	—	—	—	480	—	—	—	210,800	150	224,270
	10,729,660	63,128,517	1,452,040	23,690,169	8,080	603,258	4,842,570	23,811,320	—	9,282,640	2,544,850	9,318,970	6,400	692,866	19,583,600	132,527,650

SCOTCH OIL COMPANY MEETINGS

* * *

The Tarbrax Oil Company, Limited.

The second general meeting of shareholders of the above company was held last week at Glasgow, Mr. William Fraser occupying the chair.

In moving the adoption of the report, the Chairman said that at the last annual meeting he said that "the success of the company turned on the question of shale. It is necessary to have a sufficient output, and to be able to work it at a reasonable cost." It had taken them longer to reach this stage than they at one time anticipated. Indeed, they had not quite fully reached this stage yet. Owing to the fault met with in No. 1 pit, Cobbinshaw, development was delayed, and the output was not yet equal to the requirements of the works. The outputs, however, were steadily increasing, and he expected that within two months' time they would be equal to present throughput. Meanwhile, results suffered through (1) increased cost occasioned by lifting shale from bing, and (2) impaired yields due to the use of bing shale. Regarding the new seam of shale being opened out on the Cobbinshaw estate, 60 tons had been taken to Pumpherston, and tested in the experimental retort there, and the results as regarded yields of oil and sulphate of ammonia proved very satisfactory. The shale haulage way from this new mine to the works was expected to be completed and working by July, and it was estimated that within six months an output of 300 tons per day would be available from this mine. The works were now completed in all their details, and were working satisfactorily. The whole plant and arrangements were of the most complete kind, and the utmost satisfaction might be expected from the working of the plant. It was less than two years since the company was formed, and, looking to the magnitude of the task connected with the erection of the works, and the development of the mineral fields, where some unexpected difficulties were met with, they would agree that an undue time had not been occupied in developing the property, and putting it on a profit-earning basis. Whilst he was not going to prophesy as to results for the future, he had no hesitation in saying that when the developments mentioned were completed, and the output and throughput increased to the extent of a third bench of retorts, the results would then be satisfactory alike to the directors and the shareholders. Until this satisfactory result was attained there would be no relaxation in the efforts of the management, and everything that could possibly be done to reach this satisfactory position at the earliest possible time would be done.

Mr. John Paterson, Edinburgh, seconded, and the report was unanimously adopted.

The retiring directors—Mr. Thomas McLintock and Mr. Thomas Alexander—were re-elected.

The Pumpherston Oil Company, Limited.

The annual meeting of the shareholders was held in Glasgow, on Tuesday of last week—Mr. John Paterson presiding.

The Chairman, in moving the adoption of the report, which has already appeared in the Review, said it was almost unnecessary for him to say how gratified the directors felt at being again in a position to submit to the shareholders such a satisfactory report, which notwithstanding the fact that there had been a drop in the value of the company's products, amounting for the year to about £20,000, was in every sense the best they had ever put before them. Without going into great detail, he might say that this result had been attained, first, by the continuous introduction of improvements; second, by the judicious extension of the company's business; and, third, by doing these two things without adding to the share capital of the company. In point of fact, if the shareholders would take the trouble to make a careful examination of the abstract balance-sheets for the last few years, they would find that while on the one hand continuous improvement and extension had been going on, the share capital had not only been added to, but the floating capital, in the shape of debentures and loans, had been almost extinguished. The directors hoped that in another year the balance of this floating capital, which amounted to £21,770, in the shape of debentures, would entirely disappear from the balance-sheet, and that there will have taken its place a substantial sum in the shape of a reserve fund for working capital. Coming to the future, he might say that the prospects were good, and, in the absence of any unforeseen developments of an unfavourable character, the directors anticipated for the current year a satisfactory result. Their chief products, sulphate of ammonia and solid paraffin, were both at present in a satisfactory position, and liquid products had reached such a low level of values that there did not appear to be much likelihood of any further drop, so that, with their practically unlimited supplies of shale, their improved and increased powers of production, their wide and extended markets, together with their small capital, they were now in a very strong and favourable position. The Chairman concluded by proposing the adoption of the report and the declaration of a dividend at the rate of 6 per cent. per annum on the preference shares and a dividend at the rate of 30 per cent. per annum on the ordinary shares of the company, both free of income-tax.

Mr. William Fraser seconded the motion, which was unanimously adopted.

Messrs. R. B. Tennent and Archibald Fraser were re-elected directors; the directors were awarded 1,200 guineas for their services during the year, and Mr. Thomas L. Selkirk was re-elected auditor.

THE JENNINGS OUTPUT CONTINUES TO INCREASE.

LATEST DETAILS.

The production of the Jennings oil field continues to increase, and during the first half of the past month it made wonderful advance. On the first of the month, the No. 3 well of the Jennings-Hayward Oil Syndicate came in with an initial production of 12,000 barrels per day, and is now reported to be producing at least half that amount. A few days later the Producers' Oil Co.'s Latreille No. 5 came in a gusher, and now has a yeild of about 6,000 barrels, while another well belonging to Messrs. Guffey and Bass is responsible for 3,000 barrels daily of new production. The before-mentioned wells are all situated inside the defined productive area, but the Crusel-Newton No. 1 well which is being operated with compressed air and making about 1,000 barrels daily, extends the proven territory considerably to the east. When the output of the Jennings field in the middle of May is compared with that of the end of April, an approximate increase of production is shewn of over 18,000 barrels per day. Operations are very active in the field, and it is the general belief that in a short space of time, the output of Louisiana's territories will be still further augmented.

EXPORTS of PETROLEUM and its PRODUCTS from AMERICA for the Years 1904 and 1905 (excluding Texas).

(*Compiled by Messrs. LANE and MACANDREW, 26, Great St. Helens, London.*)

	REFINED.						CRUDE.			
	Bulk. Equivalent in barrels.		**Barrels.**		**Cases.**		**Bulk.** Equivalent in Barrels.		**Barrels.**	
	1905.	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.	1904.
British Isles	2,359,213	1,828,518	29,995	5,399	26,819	2,200	..	..	100	1
France	177,491	102,362	6,246	14,991	300	400	1,073,426	1,049,087	2,400	2,652
Germany	3,008,158	2,515,870	7,300	380	49,005	62,510	98,276	114,511	..	14
Holland	2 898,471	2,721,704	505	608	..	..	..	..	..	..
Belgium	910,963	729,095	410	495	..	..	..	..	..	..
Norway	195 023	177,301	..	..	25	..	..	..	..	..
Sweden	385,741	340,483	25,735	31,897	1,500	25	..	..	11	..
Denmark	354,692	290,902	..	130	..	..	..	..	..	..
Finland	..	..	..	..	..	..	..	..	..	..
Spain and Portugal	78,777	77,710	365	1,170	22,375	97,795	173 756	195,930	..	..
Malta	9,505	..	..	..	7,180	3,100	..	..	..	..
Italy	713,664	402 653	..	..	5,400	9,832	..	..	..	..
Austria-Hungary ..	..	..	601	..	..	..	..	..	..	..
Greece	..	..	..	..	158,721	2,599	..	..	..	..
Turkey in Europe ..	..	..	..	..	132,000	..	..	..	..	..
,, ,, Asia ..	..	..	..	..	126,538	..	..	..	..	..
Africa, including neighbouring Islands, but excluding North Africa, Egypt, and Zanzibar	..	..	7,801	41,214	1,699,980	1,440,522	..	..	300	49
Africa (North) ..	30,578	..	899	..	14,000	41,931	..	..	..	..
Egypt	..	..	..	..	587,875	19,381	..	..	..	..
Java, Padang, Macassar, Moluccas, Bandjermasin, and Palembang	..	..	..	..	1,061,138	1,233,116	..	..	..	..
Straits, Rangoon, Philippines, Saigon, Bangkok, Mauritius, and Vladivostock ..	..	..	..	..	1,969,418	1,422,126	..	..	..	..
India, including Aden, Persian Gulf and Colombo	..	..	..	..	1,213,539	825,222	..	..	..	..
China	..	..	..	..	7,125,770	9,136,435	..	..	..	..
Japan	..	..	..	..	3,565,104	4,646,635	..	..	..	..
Canada	54,908	21,917	19,451	43,866	16,518	11,345	..	..	18,500	..
West Indies and Central America	..	..	14,059	12,121	836,830	928,514	255,641	230,171	1,833 Cases 124,383	654 Cases 347,554
South America ..	..	..	2,240	4,344	4,994,375	4,895,745	..	..	10,005 Cases 606	7,981 Cases 16,307
Australia and New Zealand	..	..	208	235	1,905,594	2,365,810	..	..	100 Cases 740	Cases 100
Pacific Islands ..	..	..	7,099	644	64,298	94,646	..	..	521,493	273,960
Eastern Ports ..	567,355	26,000	1,138	1,002	500	3	..	..	1	..
Totals	**11,744,541**	**9,234,517**	**123 962**	**158,496**	**25,584,802**	**27,239,892**	**1,601,099**	**1,589,699**	**554,743** Cases **125,729**	**385,311** Cases **263,961**

Naphtha exports for 1905 amounted to 401,455 barrels (in bulk), 59,131 barrels, and 269,363 cases; Gasolene, 17,253 cases and 3,229 barrels; and Gas Oil, 1,204,522 barrels (in bulk).

The Exports from Port Arthur (Texas) to the United Kingdom and Continent of Europe for the year ended 31st December, 1905, were:—432,354 barrels Refined; 407,402 barrels Residuum; and 17,150 barrels Lubricating.

DETAILS OF BAKU PRODUCTION AND BORING IN FEBRUARY, 1906.

The following details of the Baku production of crude oil in February are supplied in the latest issue of the *Neftiannoie Dielo*:—

		Production (in poods).				
	Number of Wells in Exploitation.	By Baling.	By Spouters.	Casual.	Total.	Average per Well per Day.
Balakhany	435	4,518,976	—	10,320	4,529,296	417
Ramany	421	10,403,360	54,500	312,811	10,770,671	956
Saboontchi	142	5,484,243	—	41,355	5,525,598	1,499
Bebe-Aibat	180	10,257,464	—	54,500	10,311,964	2,192
Total in February, 1906	1,178	30,664,043	54,500	418,986	31,137,529	1,020
,, January, 1906	1,019	29,154,176	4,793,300	296,864	32,244,340	1,208
,, February, 1905	1,535	40,728,705	1,374,700	415,375	42,518,780	1,068

EXPORTS of PETROLEUM and its PRODUCTS from BATOUM for the Years 1904 and 1905.

(Compiled by Messrs. LANE and MACANDREW, 26, Great St. Helens, London).

	REFINED.				LUBRICATING.		RESIDUUM		DISTILLATE AND CRUDE.	
	In Bulk. (Poods)		Cases.		In Bulk. (Poods.)		In Bulk. (Poods.)		In Bulk. (Poods.)	
	1905.	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.	1904.
British Isles	7,859 683	13 304,835	..	..	1,482,617	2,045,988	53,313	435,720	..	..
France	221,505	895,913	..	..	1,794,679	2,015,465	77,221	209,397	2,230,693	7,356,892
Germany	587,240	667,945	..	..	1,918,565	2,000,627	..	105,491	..	..
Holland	1,545,896	2,030,655	..	..	..	..	..	..	..	..
Belgium	2,225,258	2,900,078	..	..	1,633,249	2,153,745	154,064	269,423	..	..
Norway	548,603	498,388	..	..	..	..	..	..	..	..
Sweden	168,704	277,571	..	..	..	..	..	..	..	..
Denmark	84,281	..	..	..	..	..	..	..	..	..
Finland..	..	..	..	..	..	..	..	..	..	..
Russia (Black Sea Ports)	2,563,530	3,492,883	..	..	..	..	..	..	..	..
Spain and Portugal..	125,279	..	..	64,155	92,176	150,932	..	40,740	..	..
Malta	243,356	40,250	..	..	..	..	..	..	..	..
Italy	1,120,370	1,457,235	..	8,290	..	144,729	25,029	38,553	..	..
Austria-Hungary ..	230,070	650,657	..	..	274,061	512 054	..	..	..	..
Greece	..	..	55,300	109,111	..	..	..	..	..	..
Turkey in Europe ..	..	..	766,114	1,855,925	..	..	..	..	..	..
,, ,, Asia ..	..	..	491,030	1,300,915	..	..	..	..	..	..
Constantinople, F.O.	..	..	592,542	1,340,065	..	..	..	..	..	..
Africa (North) ..	262,942	326,172	..	124,800	..	..	..	..	..	..
Egypt	2,316,489	740,559	334,276	1,028,561	..	..	..	..	..	..
Africa	..	..	..	70,000	..	..	..	..	..	..
Java, Padang, &c. ..	..	..	..	219,350	..	..	..	..	..	..
Straits, Rangoon, Philippines, Saigon, Bangkok, Zanzibar, and Vladivostock	..	..	140,000	645,325	..	..	.	..	..	..
India, including Aden, Red Sea, and Persian Gulf	..	..	77,480	2,338,216	..	..	..	..	..	..
China	..	..	589,924	2,543,576	..	..	..	..	..	..
Japan	..	..	136,360	722,340	..	..	..	..	..	..
Australia	..	..	..	..	..	..	..	..	..	..
Eastern Ports ..	2,661,528	5,333,026	..	..	..	..	..	..	..	..
Totals	**22,764,734**	**32,617,167**	**3,193,026**	**12,370,629**	**7,195,347**	**9,023,540**	**309,627**	**1,099,324**	**2.230,693**	**7,356,892**

Refined Oil, in barrels, was exported to the extent of 3,522 in 1905 and 4,465 in 1904; Lubricating, in barrels, 30,433 in 1905 and 57 771 in 1904; Residuum, in barrels, 2,789 in 1905 and 5,486, in 1904; Solar Oil, 2,041,633 poods in 1905 and 5,596,555 poods in 1904.

From NOVOROSSISK for the Years 1904 and 1905.

	REFINED.				RESIDUUM AND GROSNY CRUDE.			
	In Bulk. (Poods.)		In Bulk. (Poods.)		In Bulk. (Poods.)		In Bulk. (Poods.)	
	1905.	1904.	Increase.	Decrease.	1905.	1904.	Increase.	Decrease.
British Isles..	2,920,308	5,466,087	..	2,535,779	186,497	337,202	..	150,705
France..	35,585	1,002,886	..	967,301	372,952	255,777	117,175	..
Germany	2,043.988	2,771,852	..	727,864	..	..	..	..
Holland	925.306	713,306	212,000	..	..	..	..	..
Belgium	..	..	..	..	267,454	366,200	..	98,746
Norway	..	..	..	..	..	..	..	..
Russia	1,115,141	1,309,056	..	193,915	589,893	471,955	117 938	..
Spain and Portugal ..	..	..	..	..	181,262	..	181,262	..
Malta	..	61,656	..	61,656	..	..	..	..
Italy	434,557	1,411,666	..	977,109	219,930	351,186	..	131,256
Austria-Hungary	247,637	203,355	44,282	..	31,483	..	31,483	..
North Africa	..	184,930	..	184,930	..	..	..	..
Egypt	..	1,426,191	..	1,426,191	..	..	..	..
Eastern Ports	2,065,262	7,339,007	..	5,273,745	..	..	..	..
Totals	**9,787,784**	**21,879,992**	**256,282**	**12,348,490**	**1,849,471**	**1,782,320**	**447,858**	**380,707**

Distillate and Crude, 976.292 poods in bulk in 1905 and 803,508 poods in bulk in 1904; Solar Oil, 568,798 poods in bulk in 1905 and 1,555,506 poods in bulk in 1904.

A New Gas Company.—The Burning Spings Natural Gas Co. has been organised by London (Ky.) capitalists to develop the great natural gas fields of Clay county. A number of excellent gassers have already been drilled, and the new concern plans to utilise the product for commercial purposes.

The Gulf Pipe Line.—There is again a rumour that matters are moving toward the accomplishment of the proposal to lay a pipe line from the Mid-Continental fields to the Gulf of Mexico. The Kansas fields are now being inspected by one of the promoters of the scheme.

AMERICAN NOTES.

Work at Batson.—In the Batson field there is little activity, and during the first half of May, though drilling was in progress upon several locations, no wells were completed. Meanwhile the production of the old wells is falling off to some slight extent, and is now 7,500 barrels daily.

A Good Strike in Indiana.—A communication from Red Key, Indiana, dated May 10th, states that oil has been struck in a well belonging to the Oden Oil and Gas Co., upon property in Jay county, and the production is estimated at several hundred barrels. This is the largest well of the year in the Indiana field.

At Saratoga.—In spite of a number of successful completions in the Saratoga field, the production is steadily decreasing, and on May 12th it was estimated at 7,400 barrels per day. An attempt has recently been made to prove territory adjacent to Saratoga township and known as the heavy oil district, but this is to be abandoned being unsuccessful.

More Pipe Lines for Mid-Continental Fields.—The Kansas and Texas Oil Co. operating in Kansas, Indian Territory, and also in the Cleveland Pool, has recently filed an application for permission to construct a pipe line from the company's property in the Bartlesville and Cleveland Territory, to make connection with the proposed refinery, to be erected at the latter place.

The Latest from Canada.—The *Petrolia Advertiser* states that in the Canadian oil territory after months of quiet, the oil industry is now "picking up," nearly all the rigs being at present under contract. There is probably more leasing of untried territory now going on than at any previous time. Kent county, which created such a furore some three years ago, is again receiving considerable attention from American capitalist, who this time intend to drill deeper.

The Kentucky-Tennessee Oil Field.—Oil development activity in the Kentucky-Tennessee fields is greater than at any other time this year. Oil now commands two cents more than formerly, and this rise, with the prospect for additional advances, has had a stimulating effect on the industry. During the past few weeks Wayne county has been the centre of attention. Two districts of that field, Sinking and Parmleysville, are rapidly undergoing an expansion. About 25 rigs are now in operation in both districts, and strikes are an every-day occurrence.

Operations Partially Suspended in Coalinga.—In referring to the conditions in the Coalinga oil field, the American *Mining and Engineering Review and Electrician* says that operations are practically suspended at present owing to the low price of the product. The wells are not shut down, because the terms of the various leases necessitate a certain amount of work each month, but it is only these conditions which are preventing a complete shut-down. The wells of the Wabash Co., for instance, are yielding about 400 barrels daily, though the company's production could easily be increased to 7,000 barrels daily.

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PRODUCTION IN GALICIA IN APRIL.

The production of crude oil in Galicia during April and the stocks at the end of the month, according to official statistics, were as under (in tons) :—

	Production during April.	Stocks on 31st April.
West Galicia—		
Potok	1,418	6,045
Rogi	1,935	11,314
Rowne	89	241
Tarnawa-Wielopole-Zagorz	1,504	5,270
Krosno	2,618	17,217
Other West Galician fields	2,678	10,636
East Galicia—		
Boryslaw-Tustanowice	50,718	405,499
Schodnica	4,140	32,682
Urycz	1,240	16,104
Mraznica	130	1,662
Other East Galician fields	1,000	270
Total	67,470	506,940

AMERICAN PETROLEUM EXPORTS.

STATISTICS FOR APRIL.

According to the official publication of the Washington Bureau of Statistics, the exports of petroleum from America from the various ports during April were as under :—

	1905. Quantities. Gallons.		1906. Quantities. Gallons.
CRUDE—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	6,402,858		2,354,272
New York	—		—
Philadelphia	292,650		4,788,767
Galveston	2,824,264		1,656,941
Total	9,519,772	Total	8,799,780
Total value for the month, 1905			$467,353
,, ,, ,, 1906			$509,784
NAPHTHAS—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	—		—
New York	161,006		2,332,898
Philadelphia	1,194,714		1,278,626
Galveston	—		—
Total	1,355,720	Total	3,611,524
Total value for the month, 1905			$103,615
,, ,, ,, 1905			$270,348
ILLUMINATING—			
Baltimore	5,415,249		938
Boston and Charlestown	3,460		5,736
Delaware	—		—
New York	45,532,769		43,502,301
Philadelphia	25,326,442		20,846,182
Galveston	—		2,513,553
Total	76,277,920	Total	66,868,710
Total value for the month, 1905			$4,848,257
,, ,, ,, 1906			$4,216,368
LUBRICATING AND PARAFFIN—			
Baltimore	238,428		462,540
Boston and Charlestown	12,918		10,276
Delaware	—		—
New York	6,210,853		9,980,128
Philadelphia	2,013,411		4,018,353
Galveston	144,401		18,928
Total	8,620,011	Total	14,490,255
Total value for the month, 1905			$1,138,851
,, ,, ,, 1906			$1,683,253
RESIDUUM—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	—		—
New York	1,367,856		1,984,535
Philadelphia	4,516,638		1,779,684
Galveston	1,066,086		—
Total	6,950,580	Total	3,764,219
Total value for the month, 1905			$207,573
,, ,, ,, 1906			$111,253
TOTAL MINERAL OILS—			
Baltimore	5,653.677		463,478
Boston and Charlestown	16,378		16,012
Delaware	6,402,858		2,354,272
New York	53,272,484		57,799,862
Philadelphia	33,343,855		32,711,642
Galveston	4,034,751		4,189,422
Total	102,724,003	Total	97,534,688
Total value for the month, 1905			$6,765,649
,, ,, ,, 1906			$6,791,705

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The Oil Trade of Java.—The British consular report upon the trade of Java for the year 1905, states that the imports of American oil into Java shew an increase of 288,011 cases, while owing to the disturbances in Southern Russia, no imports were made from that country. Some 1,459,213 cases of Sumatra oil were imported during the year and the production of Java oil was 1,957,124 cases, as against 1,903,588 cases in 1904. The consumption of this article in Netherlands-India shews a falling off of 114,038 cases, as compared with the preceding year, or nearly 2½ per cent.

THE CEDROS OIL FIELDS OF TRINIDAD.

REPORT BY THE GOVERNMENT GEOLOGIST.

(Continued from page 366.)

The next indication of oil observed is in a well on the west side of the Moruga Road, about one mile from its southern termination. This well is situated a short distance north of the crest of the anticline at the foot of the sandstone hills. It penetrates into a bed of dark argillaceous sand impregnated with oil, which exudes very slowly, forming films on the surface of the water. This indicates the presence of the No. 1 streak below the surface, but the evidence of cretaceous inliers in the neighbourhood makes it doubtful whether any great production of oil could be obtained in this locality.

A mile and a-half north-west of La Lune a remarkably extensive oil show occurs. Solid evidence is very scanty, but in a creek to the north-east a fairly good section is obtained. The "show" consists chiefly of small cones of soft pitch with fine sand and clay, and a little sticky oil. There are upwards of twenty of these small cones, and the soil is full of hardened pitch for a distance of about a quarter of a mile from east to west, and 200 yards from north to south. There must be one or two hundred tons of pitch occurring in this manner on the surface. The soil is a brown sand closely resembling the debris of the No. 1 oil streak as seen on the central anticline of the Mayaro-Guayaguayare oil field. The hard pitch is chiefly on the northern side, and the cones with oil and gas are chiefly to the south, while one mud volcano, with a mound 10 yards in diameter, and a crater of 4 feet, is situated near the south-eastern extremity of the "show." A sample of the water from this mud volcano was submitted to the Government Analyst, who found it contains, besides oil:—

	Per Cent.
Total Solids..	2·506
Loss at 180 C (water of hydration and ammoniacal salts) ..	·0149
Sodium Chloride	2·04
Alkalinity as Na_2CO_3	·38
,, as K_2CO_3	·40

And traces of iron, alumina, sulphates, lime and potash. In the creak to the north-east an inlier of cretaceous strata, with tertiaries both to north and south, is exposed, a bed of iron-stained conglomerate exactly like that mentioned above was observed, and a flow of pitch has taken place in a dry ravine slightly further to the north-westward. From this evidence, and especially from the amount of pitch present, it seems that the show is due to an outcrop of the lower oil sand against an inlier of cretaceous, which passes beneath the surface to the westward.

For the next few miles no indications of oil, with one doubtful exception, have been observed along the crest of the anticline, but as the ground was examined very hurriedly it is possible that many indications may exist in localities not visited.

At Mont Diablo evidence of oil-bearing rock is again forthcoming. Just south of the trigonometrical station on the summit, two gas pools with traces of oil are seen in a clay outcrop, and within a distance of 150 yards to the westward two small mud volcanoes mark the line of crest. There is a constant discharge of gas from one of these.

Again, at a distance of half a mile from the summit just beyond a small inlier of cretaceous strata, a group of gas pools, with a little oil, and in one place some liquid pitch, occurs in a similar clay band immediately below the outcrop of a belt of hard sandstones of Galeota type.

At a distance of a mile and three quarters further to the westward, near the Quinam trace, a "show" 150 yards in length and 20 in breadth occurs. It is composed of small flat cones of mud with sticky oil and discharge of gas, while the soil in the neighbourhood is full of pitch. This "show" appears to be an outcrop of the oil rock resting on the cretaceous inlier, which occupies the surface to the southward.

Where the anticline crosses the Jayabal River, the odour of petroleum was noticed, but the section is obscure and no distinct indications of oil were observed. On Majawal River, however, small beds of sandstone impregnated with oil are to be seen in the clays, and a small mud volcano lies about 100 yards east of the river.

Where the anticline approaches the coast, there are, as noted above, numerous exposures of oil-bearing sandstones, but no large "show" attributable to the No. 1 oil streak, the horizon of which is probably at some little distance beneath the surface in this locality.

At Chagonary Point, on the crest of the anticline, there is a very large mud volcano, which gives evidence of having erupted with great violence at no very distant date. The circular area of barren mud marking the crater is some 80 yards across, and a flow of mud has descended to the beach, a distance of 250 yards. Trees one foot in diameter have been broken, and the upper part thrown away from the centre of the outburst. Blocks of rock up to 1·5 inches in diameter have been brought up from beneath the surface and scattered about the mud crater. They consist of ironstone nodules, nodules and crystalline groups of pyrites, cretaceous pebbles, coarse tertiary grit, and fine pale sandstone with plant remains, and calcite vein-stuff. A bituminous odour is noticed on all the porous ejected fragments, and, in fact, a smell of petroleum pervades the whole locality, though at present the only signs of activity are half-a-dozen minute cones arranged in a line across the northern portion of the crater. Of these cones only two or three are active, emitting at frequent intervals a few bubbles of gas with saline oily mud. It is said there was an outburst in this place five years ago.

Smaller mud volcanoes occur nearer to Erin among the stiff clays near the shore, but it is doubtful whether they are due to the No. 1 oil streak or oil-bearing beds at a higher horizon. Thin sandstone beds containing oil are numerous at some parts of the coast section.

A pitch bank is said to exist in Erin Bay: I have been unable to verify this, but if it be the case, it is doubtless due to the No. 1 oil streak.

The anticline emerges at Islet Point, and there the oil shows are particularly striking, four distinct mud volcanoes occurring in a distance of 250 yards. The largest has an area of 30 yards in diameter with two craters, while another has a steep cone 12 feet in height. There is little oil seen at the surface, but most of the vents are discharging gas steadily. On the beach below tide-mark, to the west of the point, there is an exudation of mud, gas, and a little oil through the sand, from three distinct orifices.

The next evidence is at Galfa Point, where the anticline emerges from the sea again. A raised beach is found to be impregnated with oil, which is gradually becoming inspissated. At 100 yards from the beach, at the edge of a swamp, a pitch and mud cone 8 feet high, with steady discharge of gas and oil from the 18 inch crater, is observed. Further westward, are two distinct mud volcanoes, one being a mud pool with copious discharge of gas and a little oil, and the other a perfect cone of sandy clay, the base being nearly 50 yards in diameter.

In L'Envieuse estate and on Columbia estate to the westward, mud volcanoes become so numerous that it is needless to mention them all, 19 distinct cones or groups of cones, besides other minor indications, have been observed over a distance of one mile and a quarter. These "shows" follow two distinct lines, the northern being marked by numerous small mud volcanoes, and the southern by a few larger ones. The evidence regarding this, and the probable reasons for it, will be discussed in a detailed special report on the district. Four very large craters, where violent outbursts have occurred, have been mapped, the largest having a diameter of 150 yards. This is situated in Columbia estate, and is the last oil show seen on this line in Trinidad. There is little sign of oil, except the odour, about the craters of most of these mud volcanoes, but some oil is seen on the surface of the muddy water in the vents, while in two localities discharge of sticky oil or liquid pitch takes place from a group of cones.

To the westward of the large mud volcano mentioned above, we enter the area of recent marine deposits, and no evidence can be seen as far as the Gulf of Paria. In the Gulf, however, or more properly in the Serpent's Mouth, evolutions of oil has been observed, while the pitch deposits and oil springs of Pedernales and Guanipa, in Venezuela, lie apparently on the same line of strike, and are probably referable to the same oil rock (No. 1 streak).

The foregoing evidence is sufficient to prove the wide distribution of oil-bearing rock at the horizon of the No. 1 streak.

It will be noticed that, considering the anticline as a whole, the mud volcano type of "show" becomes more frequent in the western part of the area, while seepings of oil are the rule in the eastern part. This, however, is probably not due to a greater amount of gas in the western than in the eastern districts, but to the fact that the environment is argillaceous in the west and more arenaceous in the east: oil can escape readily through sandstones, and gas may pass off rapidly, but where impervious clays cover the oil rock it is difficult for oil to penetrate to the surface, and only gas may be evolved, either bubbling slowly through the puddled clays in low lying or swampy localities, or accumulating till the pressure is sufficient to cause a paroxysmal outburst. The water in the craters of the mud volcanoes is invariably saline, but very little liquid is discharged.

The evidence regarding the Rio Blanco oil sand (No. 4 streak) is by no means so complete as that relating to the No. 1 streak (Galeota oil sand). The fact that it usually crops out with a low dip probably accounts for the infrequent occurrence of oil shows where this horizon comes to the surface. It has been pointed out that this horizon is represented by lignitic beds for a long distance on the south side of the anticlinal crest, and that it is only in clay environment that the stratum has proved petroliferous.

It was not possible to make any very thorough search for the outcrop of this streak on the northern side of the anticline, but in two distinct localities, 18 miles apart, evidence of oil has been found at approximately the same horizon. The first and most important of these is situated half a mile south of the Erin-Siparia road, at a point six miles from Siparia and five from Erin. It consists of a deposit or series of deposits of hard pitch, which has exuded and mixed with the soil for a distance of about a quarter of a mile in a west-north-west and east-south-east direction, in and about the banks of a small creek. There is no very great quantity of pitch in sight, but it is distributed so widely that a part of the "show" was considered important enough to be reserved for road purposes. To the southern side of the "show" soft pitch appears, and a thick sticky oil exudes into the creek, where also a steady evolution of gas may be observed. The dip of the strata varies from 45 degrees to 23 degrees in a northerly direction, the general dip being about 25 degrees to N.N.E. The oil rock is a soft grey sand overlaid by grey clays and sandy clays resting upon a bed of thick yellow sandstone. This environment is similar to that of the Rio Blanco oil sand in the coast section. The horizon is by calculation 3,500 feet above the lowest rocks exposed on the anticline to the southward, but as the lowest tertiaries are not exposed in that locality, the thickness of strata between the lower and upper oil rocks is probably little less than in the sections previously described, and any difference in thickness is naturally accounted for by the development of deep water deposits at the expense of shallow water deposits in the district.

I am informed that other indications of oil occur to the westward along the same line, but I was unfortunately unable to survey the ground in detail. The main fact of the proof of the Rio Blanco oil sand in this district is sufficient for the present. In this connection it is necessary to refer to a local and subsidiary anticline which crosses the Erin-Siparia road, running in an east and west direction, at a distance of four miles from Siparia. This anticline has been traced for about three miles; it flattens out to the eastward, but westward it has not been traced to its termination. This structure lies two miles to the north of the outcrop of the Rio Blanco oil sand, and should that petroliferous horizon prove productive over any considerable area in this part of the island, as seems by no means unlikely, drilling along the crest of this anticline might prove very profitable.

West of the Chatham road, the line along which the Rio Blanco oil sand might be expected to crop out, is largely concealed by swamps, and no further indications of oil have been observed till Cedros, where at a point in Ste. Marie estate, half a mile south of Ste. Marie Point, a small deposit of hard pitch occurs in an outcrop of dark sandy clay, overlaid by clays and underlaid by fine flaky sandstone. Owing to the great development of sandstones in this district, the thickness of strata appears to be greatly increased, and this outcrop must be at nearly 4,000 feet above the lower oil rock, but there seems to be little doubt that it represents the Rio Blanco oil sand.

These occurrences are sufficient to suggest that, at least in the western part of the great anticline, the Rio Blanco oil sand, or "No. 4 streak," may prove a valuable addition to the sources of oil production in Trinidad.

It may be as well to record here that this oil rock has been located in several other parts of the island, in widely separated districts, which will be described in due course in reports upon other portions of the oil territory. *(To be concluded.)*

The American Oil Market.

New York, Week ended May 26th.

The improved weather conditions are being taken advantage of by the operators in the Northern producing States to resume active operations in the fields where work had been suspended on account of the bad condition of the roads. Reports during the past week indicate a general resumption of the active search for oil, notwithstanding the claim made that owing to the very low average production of the wells there is no inducement for the driller to operate except where good results may reasonably be expected. It was believed that development work would be restricted, but it appears that the average operator is not easily discouraged or he finds the average results more profitable than he has been willing to admit. The reports during the past week shew an increase in the number of completions, says the *Oil, Paint and Drug Reporter*, but it is questionable if the average results shew any decided improvement, the great majority of the new wells shewing oil being small pumpers, while the percentage of dry holes has shewn no decrease. It is believed extensions to what was previously regarded as defined territory have been established, but the importance of these is in doubt, and not until other wells in the vicinity are completed can this be determined. There appears more disposition to make locations beyond known productive limits, and should this class of operations result favourably it will prove a strong incentive to extend operations still farther, while many predict there will be considerable wildcat work during the summer months. Hope of increasing the production apparently rests on the success of such endeavours, but, judging from past experience, there is little prospect of finding a new pool of magnitude in the older producing States. In the Mid-Continent fields the conditions shew no change, the production still increasing and stocks accumulating at a rapid rate, though now that the pipe line to the coast is in operation it is hoped that this will relieve the situation. The production in Texas is about stationary, but in Louisiana there is a large increase. Prices shew no further change, but are firm.

Refined and Products.—The demand for refined for export has been good during the past week, shewing, as we have contended, that although there had been a lull in the demand it was only temporary, and the requirements shew no falling off. Conditions abroad shew no change, and the movement may be expected to continue large, varying from week to week according to the position of the tank fleet. The engagements during the past week foot up over 200,000 barrels, all for shipment in bulk.

The price for barreled oil has remained firm at 7·80c. for New York loading, and at 7·75c. for Philadelphia loading. The principal foreign markets are steady. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. 3d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export have been in light request, and sales of about 100,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in light request, and sales of about 20,000 barrels are reported. Pennsylvania crude is quoted at 7·80c. in barrels.

Crude naphtha continues steady. For export, sales of about 25,000 barrels have been reported.

CLOSING QUOTATIONS.

Crude.		Week ended May 19. 1906.	May 26. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4·70	4·70
Residuum, bbls. for export	.. ..	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were:—

	Week ended May 26. 1905.	May 26. 1906.
Tiona	1·42	1·74
Pennsylvania	1·27	1·64
North Lima	0·86	0·98
South Lima	0·81	0·93
Indiana	0·81	0·93
Canadian Oil:		
Petrolia	1·27	1·37

Refined—For Export.

		Week ended May 19.	May 26.
Cargo Lots for export	per gal.	7·80	7·80
In bulk		4·70	4·70
Philadelphia loading		7·75	7·75

Refined in Cases—110 Fire Test.

	Week ending May 19.	May 26.
5,000 to 10,000	10·35	10·35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended May 19.	May 26.
120 fire test, S.W.	per gal.	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ending May 19.	May 26.
Naphtha, crude, car lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	14	14

Pennsylvania Oil Runs from May 18th to May 23rd were:—May 18th, 81,734; May 19th and 20th. 120,836; May 21st, 33,086; May 22nd, 63,610; May 23rd, 61,436. For the month of April, 2,202,441.

The Deliveries of Pennsylvania Oil for the same dates were:—60,943; 124,932; 54,031; 67,932; 65,826, For the month of April, 2,305,957

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended May 25th and from Jan. 1, were as follows:—

	Week.	Year.	1905.
Refined, barrels and bulk	238,100	4,517,000	4,427,500
Refined, cases	100,000	6,296,000	9,069,000
Crude, barrels and bulk	17,100	695,600	440,700
Crude, cases	—	187,000	85,000
Naphtha, barrels	26,400	202,400	205,400
Residuum, barrels	7,400	373,400	401,200
Lubricating, barrels	3,300	141,100	54,400
Total, barrels cde. eq.	430,040	9,973,612	10,730,389

Clearances for the Week.

During the week ended May 25th, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1905.
Refined	8,353,090	189,929,080	197,916,601
Crude	—	226,800	621,744
Naphtha	1,337,250	8,801,017	5,188,843
Residuum	—	—	3,294,915

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended May 25th	11,137,453
Total from New York, from Jan. 1, 1906	253,482,253
Same period last year	264,510,546
Decrease	11,028,293
From United States, week ended May 25th	21,612,094
Total from United States, since Jan. 1, 1906	461,818,864
Same period last year	492,620,260
Decrease	30,801,396

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The "Review" Shipping List.

June 7, 1906.

(*The following abbreviations are used in this table*:—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Philadelphia	Sables d'Olonne	P. Del. Break., May 24
ALCHYMIST	Shoreham	London	Arr. April 24
AMERICAN	Antwerp	New York	Arr. May 31
APPALACHEE	San Francisco	Shanghai	Arr. June 4
APSCHERON	Hamburg	Tyne	Arr. Apr. 17
ARAL	Tyne	Philadelphia	Arr. June 5
ARAS	Novorossisk	Hull	P. Consti'ple, May 23
ARGYLL	Buenos Ayres	Rosario	Arr. May 10
ASTRAKHAN	Tyne	Philadelphia	L. May 24
AUGUST KORFF	Bremen	Philadelphia	P. Tyne, June 6
AUREOLE	Tyne	Batoum	P. Consti'ple, May 29
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Tyne	Constant'ple	P. Gibraltar, June 5
BALAKANI	London	Philadelphia	P. Dover, June 6
BATOUM	Copenhagen	Tyne	Arr. May 20
BAYONNE	Genoa	Philadelphia	Arr. Gibraltar, June 2/3
BEACON LIGHT	Tyne	Port Arthur (Texas)	P. Prawle Pt., June 2
BEME	Rangoon	Calcutta	L. May 30
BLOOMFIELD	Tyne	New York	Arr. May 28
BORJOM	Alexandria	Batoum	P. Dardanelles, May 4
BRILLIANT	New York	Amsterdam	Arr. June 4
BROADMAYNE	Philadelphia	Rouen	L. May 25
BULLMOUTH	Singapore	Yokohama	Arr. June 1
BULYSSES	Kustendje	—	L. June 4
BURGERMEISTER PETERSEN	Philadelphia	Swinemunde	L. June 1
CADAGUA	Seville	Philadelphia	Arr. June 6
CALCUTTA (Br. bq.)	San Francisco	Shanghai	L. Mar. 14
CARDIUM	Cardiff	Balekpappan	P. Cape Point, May 6
CAUCASIAN	Philadelphia	London	Arr. Barry Roads, May 31
CHARLOIS	Antwerp	Kustendje	Off I. of. W., June 2
CHESAPEAKE	Manchester	Philadelphia	P. Eastham, May 29
CHESTER	Antwerp	Batoum	P. Dungeness, May 22
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Balekpappan	—.	L. May 31
COWRIE	Singapore	—.	P. Port Natal, May 21
CYMBELINE	Dunkirk	Newport	L. June 5
CZAR NICOLAI II.	Antwerp	Batoum	P. Dardanelles, June 1
DAGHESTAN	Batoum & Dunkirk	Rouen	Arr. June 5
DAKOTAH	San Francisco	Shanghai	Arr. Apr. 4
DELAWARE	New York	Avonmouth	L. May 25
DEUTSCHLAND	Rotterdam	New York	Arr. May 29
DIAMANT	Tyne	Philadelphia	Arr. June 3
ELAX	Singapore	—	L. May 21
ELISE MARIE	Rotterdam	Philadelphia	P. Dungeness, May 26
ENERGIE	Hamburg	Philadelphia	P. Tyne, May 28
ERIVAN	Tyne	Batoum	Arr. Const'ple, May 31
EUPLECTELA	Tyne	Philadelphia	Off I. of W., May 24
EXCELSIOR	Rotterdam	New York	P. Scilly, May 28
EZIO	—	—	Coasting Peru
FRANCE MARIE	Barcelona	Philadelphia	P. Tarifa, May 4
GEESTEMUNDE	Stettin	Philadelphia	P. Butt of Lewis, May 26
GENESSE	Liverpool	Tyne	Arr. June 6
GEORGIAN PRINCE	Liverpool	Cienfuegos	Arr. May 15
GOLDMOUTH	Singapore	—	L. Apr. 30
GUT HEIL	New York	Havana	L. May 25
HAINAUT (Dch. shp.)	Alexandria	Antwerp	Arr. May 26
HARRY WADSWORTH	Ibrail	Campagna	Arr. Const'ple, May 28
HELIOS	Seville	Rotterdam	Arr. Antwerp, May 29
HOTHAM NEWTON	Hartlepool	Port Arthur (Texas)	P. Dover, May 22
HOUSATONIC	SanFrancisco	Bombay	Arr. Shanghai, May 10
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Taganrog	Piræus	Arr. May 30
J. B. AUG. KESSLER	Alexandria	Sumatra	P. Eden, May 8
JAMES BRAND	Thameshaven	Tyne	Arr. Mar. 17
KURA	Newport	Ibrail	P. Constanti'ple, June 1
LA CAMPINE	Philadelphia	Antwerp	Arr. June 6
LA FLANDRE	Ghent	Philadelphia	P. Prawle Pt., May 25
LA HESBAYE	Kustendje	Antwerp	P. Sagres, June 5
LA MADALEINE	Leghorn	—	P. Gibraltar, June 4
LA VIGUESA	Marcus Hook	Gijon	Arr. May 13
LACKAWANNA	Bangkalis	Port Natal	P. Sabang, May 19
LE COQ	River Gironde	Philadelphia	L. May 22
LOUTSCH	Messina	Novorossisk	P. Const'iple, May 5
LUCERNA	Philadelphia	Bergen	Arr. June 3
LUCIFER	Newport	Philadelphia	P. Barry Island, June 6
LUCIGEN	Tyne	Batoum	P. Dover, June 4
LUCILINE	Rouen	Batoum	P. Gibraltar, June 1
LUMEN	Novorossisk	Hamburg	P. Gibraltar, June 2
LUX	Rouen	Tyne	Arr. May 17
MAKKAVEI	Batoum	Odessa	L. Apr. 21
MANHATTAN	Philadelphia	Messina and Tunis	P. Del. Break., May 17
MANNHEIM	New York	Rotterdam	L. May 26
MARGARETHA	Kustendje	Leghorn	P. Const'iple, June 1
MEXICAN PRINCE	Liverpool	Porto Rico	L. May 23
MIRA	Bombay	Singapore	L. May 25
MUREX	Palembang	—	L. May 30
NARRAGANSETT	London	New York	P. Dover, June 7
NERITE	Balekpappan	—	L. May 31
NEW YORK	New York	Southampton	Arr. June 3
OCEAN	New York	Amsterdam	Arr. June 3
ORANJE PRINCE	Banes	—	L. May 24
ORIFLAMME	Port Talbot	Philadelphia	Arr. May 31
OSCEOLA	Boston	Brunswick	L. May 25
OTTAWA	Philadelphia	Vera Cruz	P. Galveston May 8.
OURAL	Batoum	St. Louis (Rhone)	Arr. June 1
PALEMBANG	Bangkok	Palembang	L. Apr. 7
PAULA	Hamburg	Tyne	Arr. New York, June 5
PECTAN	Port Arthur (Texas)	London	P. Dover, June 6
PENNOIL	Tyne	Philadelphia	L. May 27
PERLAK	Pladjoe	Singapore	Arr. Apr. 30
PHOEBUS	New York	Hamburg	L. May 27
PINNA	London	Barry Island	Arr. June 4
POTOMAC	Philadelphia	Belfast	Arr. June 3
PROMETHEUS	New York	Hamburg	P. Dover, June 5
PRUDENTIA	Kustendje and Rouen	Middlesboro'	Arr. June 3
RION	Tyne	Libau	Arr. May 18
ROCK LIGHT	Cardiff	Port Arthur (Texas)	P. Lundy Is., May 24
ROSSIJA	Batoum	Rotterdam	P. Gibraltar, June 6

Vessel.	From.	For.	Latest Date and Position.
ROTTERDAM (Now C. F. Tietgen)	New York ..	Copenhagen	Arr. May 30
RUSSIAN PRINCE	Havana	Philadelphia	L. May 22
SALAHADJI	Singapore ..	BalekPappan	L. Apr. 21
SEMINOLE........	San Francisco	China	L. May 5
SILVERLIP	Cardiff......	Borneo	P. Barry Island, May 24
SINGU	Bombay	Rangoon....	L. May 18
SNOWFLAKE	Hull........	Port Arthur (Texas)	Arr. June 4
SOPHIE	Batoum	Tunis	At Malta, June 2
SPONDILUS	Tyne	Singapore ..	P. Beachy Head, June 4
STANDARD	Stettin &Tyne	Philadelphia	P. Dunnet Head, May 31
STROMBUS	Singapore ..	—	L. May 19
SURAM	Port Talbot	New York ..	P. Mumbles, June 1
SUWANEE	London	Kustendje ..	Arr. May 30
SVIET	Alexandria ..	Batoum	P. Dardanelles, May 25
TELENA	Soesoe......	—	L. June 3
TEREK............	Manchester	Port Arthur (Texas)	P. Sand Key, June 5
TIFLIS............	Hamburg ..	Batoum	In Tyne, June 6
TIOGA	—	—	In Pt. Liverpool, June 2
TONAWANDA	Kurrachee ..	Newcastle .. (N.S.W.)	Arr. Apr. 30
TROCAS	—	Shanghai ..	Arr. May 29
TURBO	Philadelphia	—	L. June 1
TUSCARORA......	New York ..	Calcutta	Arr. Apr. 26
TWINGONE	Rangoon....	Calcutta	L. May 21
VEDRA............	Ibrail	Bordeaux ..	L. Sulina, May 29
VILLE DE DIEPPE	Dieppe	Havre	Arr. Apr. 26
VILLE DE DOUAI	Calais and Hull	Philadelphia	P. Dungeness, May 26
VOLUTE	Soesoe......	—	L. Singapore, May 31
WEEHAWKEN	New York ..	Barrow	L. May 23
WILLKOMMEN ..	Philadelphia	Danzig	P. Elsinore, June 3
WINNEBAGO (late Kinsman)	San Francisco	Hong Kong	At Yokoha. prev. May 10

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

June 8th, 1906.

There are no changes to report in the price of refined petroleum, quotations remaining as follows :—

Russian and Roumanian, 6d.; American, 6¼d.; Water White, 7¾d.

LUBRICATING OILS.

American pale, £7 15s. to £9 10s.

American dark cylinder, from £7 10s.

American filtered cylinder, from £11.

Shellene, £5.

No. 1 Russian for spot £10 7s. 6d.

For July delivery—£10 5s.

TURPENTINE.

American Turpentine is lower for spot, namely 48s.; for June to July, 43s. 6d.; July to December, 43s.

LIVERPOOL OIL MARKET.

June 8th.

Refined oils are quiet, and sellers now quote 5⅞d. for Russian, Galician or Romanian ; and 6⅜d. to 7⅞d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, June 7th.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, June 7th.

Standard White is quoted at 7·55.

RUSSIA.

Baku, June 2nd.

The Baku oil market is firm, shipments to Astrakhan are proceeding at a forced rate. The prices are: Light crude oil, spot, 23 to 23½ copecs per pood; kerosene, in waggons spot, 24 copecs; kerosene in ships, delivery during navigation, 24 copecs; residuals in ships, spot, 25⅝ to 26 copecs.

BELGIUM.

Antwerp, June 2nd.

The petroleum market is unchanged. Price of Standard White, spot, 19½ francs per 100 kilos.

FRANCE.

Paris, June 2nd.

Illuminating oil is quoted in bulk, in whole tank waggons, 26·25 francs per hectolitre; spirit, 25·25 francs per hectolitre. Special white oil, 28·25 francs per hectolitre. Motor spirit in tins, delivered to destination, 35·25 francs per hectolitre.

GERMANY.

Hamburg, June 2nd.

The kerosene market is firm. The price of American Standard White is 7·10 marks per 50 kilos.

ROUMANIA.

June 2nd.

Prices of petroleum products inland are:—

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs. ...	3·50-3·60
Refined oil, exclusive of taxes	9·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery ...	3·00· —
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural...	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail including octro tax of 12 fcs. per 100 kilos

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·00
Benzine, sp. gr. 0·710-0·715	11·00-12·00
,, sp. gr. 0·720-0·725	8·00- 9·00
,, sp. gr. 0·735-0·760	6·00- 7·00

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IMPORTS of PETROLEUM into UNITED KINGDOM.

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED MAY 29TH, 1906—

Date	Port and Importers.	Description.	No. of Galls.	Port Whence.
May.	London—			
23	A. Duckham and Co.	Lub.	2,400	Riga
23	Union Lighterage Co.	M.Lub.	7,510	Philadel.
24	Consolidated Pet. Co. (Caucasian)	Gas	255,000	,,
24	,, ,, ,,	,,	1,367,310	,,
24	General Pet. Co. (Pinna)	Lamp	1,006,400	Pt. Arthur, Texas
24	G. W. Sheldon and Co.	Lub. Gr.	320	Antwerp
24	,,	M.Lub.	300	,,
25	Lon. and Thames Haven Oil Wharves, Ltd. (Tiflis)	Lub.	168,750	Batoum
25	A. Brown and Co.	,,	4,000	Hamburg
25	J. Barber and Co.	M.L.Gr.	1,650	,,
26	General Pet. Co. (Pinna)	Lamp	1,078,480	Pt. Arthur, Texas
28	Mordaunt Bros.	Lub.	6,550	New York
28	Scott's Wharf	,,	4,000	,,
28	J. Spurling	,,	120	,,
28	G. W. Sheldon and Co.	M.Lub.	310	Antwerp
28	London Oil Storage Co.	Lub.	2,160	Hamburg
28	W. Balchin	,,	1,000	,,
29	Fielder, Hickman and Co.	,,	3,640	,,
29	J. W. Baker	,,	3,250	Philadel.
	Liverpool—			
23	Meade-King, Robinson & Co.	M.Lub.	12,000	Hamburg
24	Liverpool Storage Co.	Lub.	2,400	,,
24	Pickfords, Ltd.	M.Lub.	300	,,
24	,,	M.L. P.	660	,,
28	C. W. Field	M.Lub.	290	Antwerp
28	Meade-King, Robinson & Co.	,,	12,800	Philadel.
28	Ismay, Imrie and Co.	,,	2,000	New York
28	Liverpool Storage Co.	Lub.	17,200	,,
28	Geo. B. Taylor	M.Lub.	39,800	,,
29	Crew, Levick Co.	,,	4,530	Philadel.
29	,,	,,	14,590	,,
29	Geo. B. Taylor	Mill Gr.	2,400	,,
	Cardiff—			
23	Guthrie, Heywood and Co.	M.Colza	2,400	Baltimore
	Bristol—			
25	Pickfords	M.Lub.	750	Hamburg
	Grimsby—			
18	J. Sutcliffe and Sons	Lub.	320	,,
18	,,	,,	410	Antwerp
25	,,	,,	1,850	,,
	Hull—			
22	W. Graham Yooll and Co.	M.Lub.	4,000	Trieste
18	Thos. Wilson, Sons and Co.	Lub.	760	Antwerp
26	,,	,,	160	Riga
26	,,	,,	760	Antwerp
25	,,	,,	6,760	New York
	Manchester—			
22	J. T. Fletcher and Co.	M.Lub.	240	Ghent
24	Anglo-American Oil Co. (Chesapeake)	Lub.	299,000	Philadel.
24	,, ,,	Illum.	965,550	,,
24	,, ,,	Gas	147,600	,,

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
May.	Manchester—			
23	Bramwell Fern and Co.	Lub.	4,270	Antwerp
23	J. T. Fletcher and Co.	,,	240	,,
28	Pickfords, Ltd.	M.L. P.	180	Hamburg
28	Meade-King, Robinson & Co.	M.Lub.	10,000	,,
28	,,	,,	5,000	Philadel.
	Newcastle—			
23	P. H. Matthiessen and Co.	,,	150	Bergen
24	Tyne-Tees S.S. Co.	Lub.	150	Hamburg
26	,,	,,	1,480	,,
26	,,	M.Lub.	600	Antwerp
26	,,	,,	1,720	,,
	Sunderland—			
28	Anglo-American Oil Co. (Lucigen)	Lamp	1,007,500	Philadel.
	Swansea—			
29	Burgess and Co.	M.Lub.	2,600	New York
	Glasgow—			
25	Burrell and Son	Resid.	4,000	Trieste
25	,,	,,	4,080	Fiume
26	Anchor Line	M.Lub.	2,240	New York
28	J. and A. Allan	Lub.	1,500	Philadel.
29	Anchor Line	,,	32,600	New York
29	,,	M.L.G.	400	,,
	Grangemouth—			
23	J. Currie and Co.	Lub.	240	Hamburg
	Leith—			
23	J. Cormack and Co.	,,	3,200	Riga
26	J. Currie and Co.	,,	2,800	Hamburg
29	W. Graham Yooll and Co.	Illum.	2,180	,,
	Limerick—			
7	Consolidated Pet. Co. (Rion)	Lamp	308,000	Batoum
	Total for Week		6,847,810	

FOR THE WEEK ENDED JUNE 5TH, 1906—

Date	Port and Importers	Description	No. of Gals.	Port Whence
May	London—			
30	Shell Transport Co. (Pectan)	Fuel	2,544,850	Port Arthur, Texas
30	Ang.-Amer. Oil Co. (Balakani)	Gas	787,800	New York
31	,, ,,	,,	532,870	,,
31	,, ,,	Lamp	2,932,820	,,
31	,, ,,	Lub.	103,860	,,
31	G. W. Sheldon	M.L.G.	350	Antwerp
31	A. Brown and Co.	Lub.	1,360	Hamburg
June				
1	An.-Amer. Oil Co. (Balakani)	Gas	1,320,670	New York
1	,,	Lub.	148,920	,,
1	Geo. S. Woodcock	,,	10,000	Trieste
1	T. H. Lee	M.Lub.	2,530	Hamburg
2	J. Barber and Co.	L.Gr.	800	,,
2	Fielder, Hickman and Co.	Lub.	2,400	Philadel.
5	,,	,,	3,600	New York
5	Anglo-American Oil Co.	,,	45,960	,,
5	,,	L.Gr.	2,420	,,
5	G. W. Sheldon and Co.	Lub. C.	785	,,
5	Humphrey and Co.	Lub.	5,430	,,
5	Mordaunt Bros.	,,	1,350	,,

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QUALITY TELLS.

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Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
June	London—			
5	Wilkins, Campbell and Co.	M.Lub.	1,360	Philadel.
5	,,	M.L Gr.	3,640	,,
5	G. W. Sheldon and Co.	,,	200	Antwerp
5	,,	M.Lub.	80	,,
May	Liverpool—			
30	W. H. Jennings	Lub.	4,000	Hamburg
June				
1	Pickfords	M. Lub.	330	,,
1	,,	Lub. P.	660	,,
1	W. B. Dick and Co.	Lub.	8,710	Philadel.
1	Crew, Levick and Co.	M. Lub.	1,220	,,
1	Meade-King, Robinson & Co.	,,	6,400	,,
1	Ang.-Amer. Oil Co. (Genesse)	Lamp	567,420	,,
1	,, ,,	Gas	293,620	,,
1	,, ,,	M.Lub.	139,350	,,
1	Cunard Steamship Co.	,,	2,800	New York
5	Geo. B. Taylor	,,	4,000	,,
5	Valvoline Oil Co.	,,	18,040	,,
5	George B. Taylor	,,	5,760	,,
5	,,	,,	9,000	,,
5	Vacuum Oil Co.	Lub.	4,480	,,
5	Burnaby and Chantrell	Lub.C.	390	,,
5	Valvoline Oil Co.	,,	615	,,
May	Bristol—			
30	First Anglo-Russian Oil Co.	Lub.	4,330	,,
June				
1	Pickford's, Ltd.	M.Lub.	140	Antwerp
2	,,	L.L.&P.	750	Hamburg
	Cardiff—			
2	Mann, George & Co. (Caucasian)	Gas	1,750,000	Philadel.
May	Grimsby—			
29	J. Sutcliffe and Sons	Lub.	400	Antwerp
	Hull—			
30	Thos. Wilson, Sons and Co.	,,	1,080	Hamburg
30	Hull & Netherlands S.S. Co.	Tar oil	1,600	Rotterdam
31	Thos. Wilson, Sons and Co.	Lub.	3,240	New York
May				
31	Anglo-American Oil Co.	M.Lub.	41,760	New York
June				
1	W. Gilyott and Co...	,,	4,000	Trieste
1	T. Wilson, Sons and Co.	,,	640	Antwerp
May	Manchester—			
31	J. T. Fletcher and Co.	M.L.G.	600	,,
June				
5	W. Hodgson and Co.	,,	910	New York
5	Geo. B. Taylor	,,	480	,,
5	,,	M.Lub.	74,560	,,
5	Wilson, Son and Co.	,,	240	Rotterdam
May	South Shields—			
30	Anglo-Amer. Oil Co. (Lucigen)	Lamp	1,043,550	Philadel.
June	Glasgow—			
5	Anchor Line	M.Lub.	65,040	New York
5	,,	M.L.Gr.	2,000	,,
5	Clyde Shipping Co...	,,	380	Antwerp
	Grangemouth—			
1	J. Currie and Co.	Lub.	2,800	Hamburg
	Leith—			
4	W. Graham, Yooll and Co.	Illum.	1,310	,,
4	J. Currie and Co.	Lub.	10,200	,,
4	G. Gibson and Co.	,,	660	Antwerp
5	J. Currie and Co.	,,	120	Hamburg
May	Cork—			
30	Cork Steamship Co.	Lamp	4,840	Rotterdam
	Belfast—			
30	Ang.-Amer. Oil Co. (Potomac)	,,	1,295,760	Philadel.
30	Consolidated Pet. Co. (Rion)	,,	515,850	Batoum
			14,348,090	
	Deduct to correct—			
	London—			
24	Con. Pet. Co. (Caucasian)	Gas	1,612,300	Philadel.
	Total for Week		12,735,790	
	Total for the past Fortnight		19,583,600	

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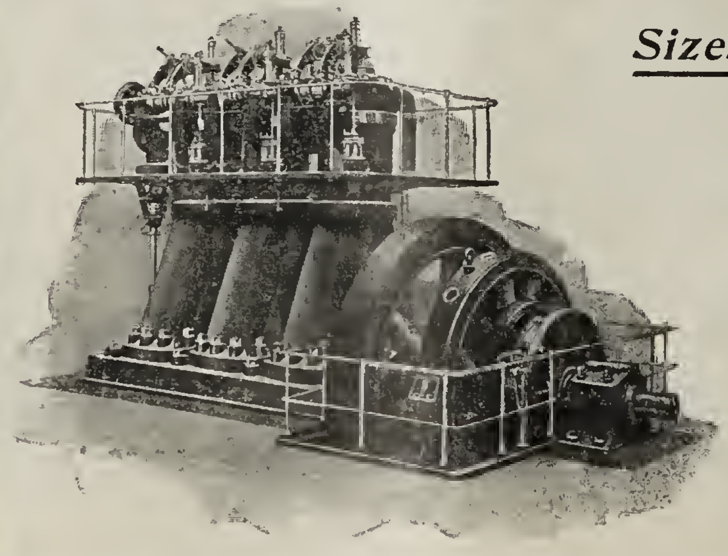

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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XIV. *(New Series.)* JUNE 23RD, 1906. No. 375.

Editorial Notes.

The Spies and Bibi-Eybat Petroleum Companies.

Upon other pages of this issue will be found the annual reports of the directors of the Spies and the Bibi-Eybat Petroleum Companies. With regard to the former concern, whose annual meeting was held on Thursday last, the past year has proved to have been exceptionally satisfactory, and though from a shareholders' point of view this is seen in the declaration of a seven per cent. dividend, the report, we venture to say, gives even more cause for gratification than would appear at first sight. The company's production during the last year has shewn a considerable increase upon that for the preceding twelve months, while the average selling price of the oil—somewhat over 20 copecs per pood—can be taken as a very profitable figure. Added to this, the Grosny fields have been practically free from serious labour troubles during the year, and so work carried on under economical conditions has proceeded almost uninterruptedly. Thus both the directors and shareholders alike have reason to congratulate themselves upon the successful turn of events. With regard to the Bibi-Eybat Company the year has been a disastrous one. Grave results followed the disturbances last year, and decreased production, together with materially increased expenses, have assisted to make the year anything but one that can be looked upon with feelings of satisfaction. One thing that can, however, be said is that with all these misfortunes the debit balance of the company has been greatly reduced during the period under review, and now stands at £8,700 as against £21,600 a year ago. This at all events is consoling.

More About Trinidad.

A few weeks ago we chronicled the important address which had been delivered to the members of the West India Committee by Mr. R. Rust, of the Canadian Exploitation Co., of Trinidad, with reference to the oil fields of that island, and now we have to record the important gathering which took place in the Whitehall Rooms of the Hotel Metropole this week, when the Government Geologist of Trinidad—Mr. Cunningham Craig—read a most interesting paper before the members of the Royal Colonial Institute upon the same subject. The paper was wrttten in a more popular style than one is generally accustomed to hear when oil fields and their importance are under consideration, and it is not too much to hope that as a result of the publicity thus brought about, a more progressive policy will be inaugurated in regard to development of the various petroliferous areas of Trinidad. We are always cognisant of the great amount of development work which has to be undertaken, ere anything like real progress can be made in a new oil territory, but now that that pioneer work has heen accomplished—and successfully too—and now that Trinidad can lay claim to possessing really valuable oil fields, it is not too much to hope that the vast rich deposits will be commercially worked, and on a scale befitting so important a branch of industry. Of the uses of oil we need not touch upon, but one thing strikes us with remarkable force, and that is the splendid situation of Trinidad for supplying the needs of a rapidly growing portion of our possessions beyond the seas. But there is no doubt that we shall shortly here more of the subject.

The American Fields during May.

The chief features of the statistics of development in the Pennsylvania and Mid-Continental fields of America during May are that not only did the month witness a general increase in active work, but the results of that work have been satisfactory to a degree. The rise in the market has had the effect of urging operators to engage in new operations, and consequently a period of great activity is passing over the whole of the territories. As shewing the general character of the region now being drilled upon, the figures which give a production of a trifle over eight barrels per new well daily in the Pennsylvanian fields speak for themselves. Such a daily production is considerably below that of former averages, for even for the preceding month, the average daily yield of the wells giving the new production was somewhat over eleven barrels. In the Mid-Continental fields, however, matters are very different. The character of the territory drilled last month proved to be very prolific, and the wells yielding the new production furnished an average of 40 barrels each. Here the lack of storage accommodation still continues to be keenly felt, and the more tanks that are erected appear to make the position more acute, in fact, it is the lack of accommodation which is tending to greatly curtail the production. When it is remembered that tank builders are pushing forward with their work day and night in these fields, one can get a fairly good idea of what would have prevailed had not such an immense organisation as the Standard been at the back of the operators in enabling this work to be carried out.

A New Combine for Galicia.

The latest intelligence from Galicia goes to shew that a determined effort is to be made in order to bring into existence a thoroughly representative organisation of the country's petroleum producers. A well attended meeting took place a few days ago at Drohobycz, Dr. Fraenkel being in the chair. It was resolved to form a union of crude oil producers in the form of a limited liability company, and the meeting approved of draft articles of association for the same. The registration of the company was entrusted to a committee of three, consisting of Dr.

Fraenkel, Mr. W. Wolski, and Dr. Goldhammer, who have also been charged with the task of obtaining the adhesion of further producers to the company, the negotiations with engineering firms in regard to the building of tanks, and further to negotiate with the pipe line companies. Should the negotiations with the "Petrolea" fail to achieve any satisfactory result, the new union will take its place.

The Baku Oil Market.

A firmer tone has lately asserted itself on the Baku oil market. The price of crude spot steadied at 25 copecs per pood; residuals have gone up to 27 copecs per pood; and kerosene is now quoted at 25-26 copecs. The growth of the crude oil production is proceeding slowly, and the supply of crude oil on the market is therefore limited. The workmen at the oil fields are again becoming restive, and making fresh demands on their employers, although the rumours of disturbance or even serious agitation are without foundation. The exports of illuminating oil to foreign markets continue to decrease. This question, which has been exhaustively discussed at the meetings of the Baku Petroleum Producers, is treated upon in our leader columns this week.

MESSRS. RUSTON, PROCTOR AND CO., LTD.

A prospectus is about to be issued by the above well known firm of engineers, inviting subscribers for an issue of 150,000 preference shares of £1 each, carrying a fixed cumulative preferential dividend of five per cent. Owing to a great increase in business, the directors find that it is necessary to financially strengthen the position of the company, whose average net profit for the past three years has been £37,000 per annum. Hence the present issue, which, it may be added, has not been nor will it be underwritten. The list opens on Monday next, and closes seven days later, and copies can be obtained of the brokers in London (Messrs. Burge & Co., 3, Austin Friars, London, E.C.), or at the offices of the company.

LATEST NEWS FROM THE GALICIAN OIL FIELDS.

The latest news from the Galician oil fields contains many interesting items. Well No. 1, on the Schutzmann plot of Messrs. Scroczynski and Bogusz, began to spout on the 5th of June, from a depth of 927 metres, with a yield of about 200 tons daily. This well is known as one of the most prolific in Galicia, and has up to the present yielded about 80,000 tons of oil. For some time past the yield has declined, and two months ago stopped entirely owing to clogging with ozokerite. The ozokerite was cleared away by warming, but still the well failed to resume flowing until pumping was resorted to. Generally speaking, there is now observed a decline in pressure of gases in the strata at Boryslaw, which renders pumping of wells necessary. At the time of writing, the above-mentioned well was yielding regularly 100 tons daily.

The total deliveries of crude oil from Tustanowice in May amounted to 15,770 tons, the larger part of which was contributed by the following wells:—Litwa, Nos. 1 and 2, belonging to Messrs. Lubanski and Osieciniski, 2,580 tons; Banzai, of Messrs. Kurr and Sulimirski, 1,900 tons; Urycz Co., 1,600 tons; Clay, No. 1, 1,260 tons; Clay, No. 2, 520 tons; Sezam, of Wolski and Co., 1,220 tons, Laupenmuhlen, No. 1, 1,150 tons.

To the above total must be added the output of the Fanto property, about 1,600 tons; the Karpathen property, about 1,000 tons; Count Resseginer, about 50 tons daily; as well as the deliveries in barrels from the Litwa and Triumph properties, about 1,000 tons; and the oil burnt as fuel, which will bring the output at Tustanowice in round figures up to 22,000 tons.

A number of the new wells now drilling at Tustanowice have reached the upper oil strata, obtaining a small production. Well No. 1, of Messrs. Dlugosz and Laszcsz, has since the 2nd June been yielding 70 tons daily from a depth of 970-980 metres.

THE COMMONWEALTH OIL CORPORATION, LIMITED.

Mr. D. A. Sutherland, the consulting engineer and general manager of the Commonwealth Oil Corporation, Ltd., states that as the result of his recent visit to Australia he is able to report that the further developments and prospecting work upon the corporation's properties have fully confirmed his original report. The extent of the shale deposits and the continuity of the beds has been most satisfactorily confirmed by tunnels driven upwards of 3,000 feet in length through unbroken shale of superior quality, and by prospecting drives on both sides of the Wolgan Valley. The developments in the Wolgan Valley warrant his stating that a supply of shale, equal to the estimated output of the Corporation's Works, can be obtained from this side of the property alone. On this account it appears less necessary to construct a railway tunnel to the Capertee, and more advisable that the works should be placed in the Wolgan Valley. In the course of prospecting, valuable coal deposits, upwards of 10 feet in thickness, have been opened up, and are being energetically proved. Three shafts have already shewn the coal bed to extend fully a mile in length. The importance of this discovery, previously unknown, indicates an additional source of income, the full extent of which will be placed before the corporation shortly.

A contract with the New South Wales Railway Commissioners has been entered into, ensuring the Corporation favourable rates not only for the main undertaking, but also for the New South Wales Shale and Oil Company's business, which had been acquired upon excellent terms.

THE RUSSIAN PETROLEUM AND LIQUID FUEL COMPANY'S NEW ISSUE.

The directors of the Russian Petroleum and Liquid Fuel Co., Ltd., announce an issue of £500,000 Six per cent. B Debentures, entitled to additional interest not exceeding 3¼ per cent. per annum, dependent upon profits, of which £400,000, in Debentures to Bearer, are now offered for sale. Messrs. Robarts, Lubbock and Co. are authorised to offer them for sale, for the account of the present holders, at 83½. The prospectus states that whenever the position of the company enables a dividend to be paid on the Preference shares, whether on account of arrears or otherwise, "additional interest at a rate per cent. per annum of such dividend shall be simultaneously paid on these debentures." Comment is superflous.

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended June 9th was 266,000 poods, or 4,288 tons; and for the week ended June 16th was 262,000 poods or 4,224 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended June 10th was 290,000 poods, or 4,675 tons; and for the week ended June 17th was 281,000 poods or 4,530 tons.

Spies Petroleum Co., Ltd.—The output for the week ended June 10th was 137,240 poods, or 2,213 tons. The output for the week ended June 17th was 137,535 poods, or 2,218 tons.

The European Petroleum Co., Ltd.—The production for the week ended June 10th, 1906, was 106,169 poods, or 1,712 tons; and for the week ended June 17th was 100,395 poods or 1,619 tons.

THE OIL FIELDS OF TRINIDAD.

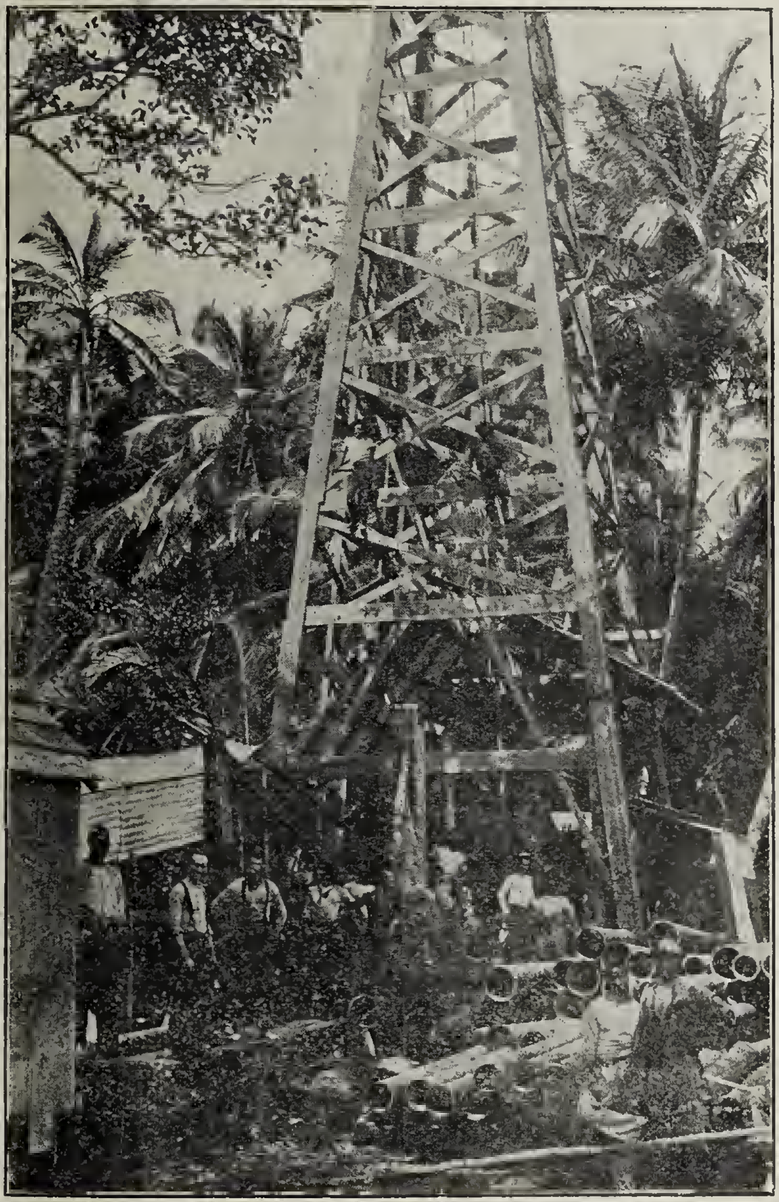
DEVELOPMENTS and POSSIBILITIES. . .

Mr. CUNNINGHAM CRAIG, B.A., F.G.S., addresses the Royal Colonial Institute.

A meeting of the members of the Royal Colonial Institute was held at the Whitehall Rooms, Hotel Metropole, on Tuesday last, for the purpose of hearing an address from the Government Geologist of Trinidad—Mr. Cunningham Craig—upon the oil fields of Trinidad.

Sir Neville Lubbock occupied the chair, and there was a large company present, including many members of the West India Committee and other gentlemen interested.

Mr. E. H. Cunningham Craig, at the outset of his address, dealt with the geographical situation of Trinidad, and mentioned that the greater part of the island was formed of tertiary rocks, and it was in this strata that all the essential conditions for the formation and natural storage of petroleum were present. It was possible to recognise throughout the greater part of the Trinidad oil fields the three main horizons characterised by the presence of oil bearing strata. The first he had called the Galeota oil sand. This occurred near the base of the tertiary series, and consisted, so far as he knew it of coarse and very porous sandstones and grits, often in several distinct beds, and covered by the Lower Galeota clay. The second main horizon he had called the Rio Blanco oil sand. This occurred from 3,600 to 4,000 feet above the Galeota oil sand, the rocks of that horizon being represented in some localities by seams of lignite, but in other places a great developmeut of oil-bearing sandstones was observed. Some 1,400 to 1,500 feet above the Rio Blanco oil sand occurred the La Brea oil sand, which as will be seen later, was the source of the famous pitch lake. That horizon has only been recognised as affording a source of petroleum in the western part of the island, so far as the geological survey had proceeded up to the present.



One of Trinidad's first Wells.

Proceeding, Mr. Cunningham Craig said he came to a more interesting part of the subject, the actual evidence of the presence of petroleum. That evidence was of several kinds, but was always easily detected. Inland they might find cones of soft asphalt each with an orifice from which the mineral oil was oozing slowly, or extensive deposits of hardened asphalt mixed with the soil. In other places they found oil exuding slowly from the ground, generally in the banks of small streams, and covering the surface of the water, often for some distance, with a brown film of oil. Gas might also be seen bubbling up through the water and oil, or there might be small springs of clear or muddy water constantly disturbed by a steady or intermittent evolution of gas. Or they might find what were called mud volcanoes, where violent discharges of gas took place, and piled up large or small cones of mud, closely resembling volcanoes in miniature. When the oil exuded from the bed of the sea, and formed a film upon the water, perhaps with some discharge of gas, the effect was very conspicuous, but even in the pathless forest which covered most of the oil lands, those surface indications were often very striking. Deposits of asphalt formed from the gradual drying up of oil by evaporation were characteristic of the actual outcrops of oil rocks, while gas wells and mud volcanoes marked the places where the oil rocks did not quite reach the surface, but were covered by impervious clays, which did not allow much oil to be exuded even under great pressure, but could not prevent a slight escape of gas.

With all those unmistakable indications of the presence of oil in the colony, it would be no doubt as surprising to many, as it was to himself, to find that very few attempts had been made to produce it on a commercial scale. Perhaps the chief reason was that the oil fields were mostly virgin forest, which was very little known, and seldom explored by any one. About fifty years ago an American company did some experimental boring near La Brea, but were not very successful owing to their work having been undertaken far too near the outcrop of the oil strata. When he arrived in Trinidad, the Oil Exploration Syndicate of Canada had bored several wells in the district of Guayaguayare, and one near the western coast of the island, without any great measure of success, and there was but one man in the colony who had a whole-hearted belief in the future of the oil field. That was Mr. Randolph Rust, who has done a good deal of pioneer work in exploring one corner of the oil fields, and to whom was due the credit of calling attention to the occurrence of petroleum in Trinidad. Of the wells that had been drilled, all but one had yielded oil of good quality, though no well had been drilled within half a mile of the most advantageous place in any district.

There were two ways of developing an oil field—one was to drill what were called "wild-cats" all over an area, and to find out by a happy chance, or by bitter experience and a process of elimination, where the most favourable localities for a production of oil occurred.

The other way was to find out the geological structure, to discover where the oil was, and how it occurred, and then to strike it at the depth that was selected as likely to be most favourable, in the most convenient spot for facilities of working and transport.

Now that they knew something of the extent of the oil field and its geological structure, they could calculate with a fair amount of accuracy at what depth any oil-rock would be struck in any given locality, while those areas where the conditions seemed most favourable could easily be determined. There, again, the remarkable geological structure of Trinidad, which had proved so confusing to American drillers, would favour experimental drillers, and would greatly increase the productivity of the oil field, for, in areas where the steep dip of the rocks carried the Galeota oil sand beyond their reach, the Rio Blanco oil sand would often be available within a hundred feet of the surface. That latter oil-rock would hardly ever attain a depth of 2,000 feet, and could be struck at any required depth up to that maximum. Should it prove to live deeper than was convenient in any locality, there was still the La Brea oil sand which might furnish an available source of petroleum. Thus there were few parts of the oil fields that might not prove productive.

Another advantage which the oil field offered was that it was not necessary to go to the least accessible parts of the island to test the productivity of the oil-rocks. Many of the most promising districts lie on the western coast of the colony, in land already partially opened up by roads and railways, and within easy reach of the calm waters of the Gulf of Paria, where no considerable engineering difficulties would be met with laying pipe in lines, building jetties, and shipping the petroleum.

As to the quality of the oil, only a few words were necessary. Many different varieties of oil had been obtained; most had an asphaltic base, but some of the minor oil-rocks seemed to be rich in paraffin. Speaking generally, the petroleum resembled Russian petroleum very closely, and this was the more interesting as—in the age of the rocks, the nature and composition of the strata, and the geological structure—the Trinidad oil fields presented many striking resemblances to the Baku oil fields. The percentage of sulphur was very small, and would not entail any expensive special refining process, as was the case with Texas oil. An average sample of crude oil from the Galeota oil-sand would and will contain from 12 per cent. to 20 per cent. of petroleum spirit, 30 per cent. to 50 per cent. of illuminating oils, 30 per cent. to 50 per cent of lubricating oils, and not more than 5 per cent. of residual bitumen.

Oils from the Rio Blanco oil sand, while still containing a considerable percentage of petroleum spirit, would, as a rule, be better in lubricating oils and residue, at the expense of illuminating oils.

It would be possible to refine those oils so so to make a large percentage of fuel oil, which would probably prove the most profitable branch of the industry in Trinidad. Situated as the colony was, with a magnificent harbour, it could not fail to become in the future a very important centre of trade and shipping; and if, as they were assured on all hands, oil fuel was to be the fuel of the future for ships, it would be possible to sell every gallon of the fuel oil produced in Trinidad without coming into competition with any of the great oil companies of other countries. The demand for petrol was steadily increasing, and the percentage of it in Trinidad oils should also find a ready sale, while lubricating and illuminating oils could be disposed of in the colony, to the neighbouring islands and at home.

To sum up, they had in Trinidad an oil field of at least 500 square miles, at a conservative estimate, and it had never been adequately tested in any part. Over a large part of that area a production of oil could be confidently expected. Much of the ground had been carefully examined, the geological structure proved, and the out-crops of the oil-bearing strata mapped. It only remained to make the actual experimental borings. They could place the derricks so as to strike the oil-rocks at any depth that might be considered most convenient, but they could not tell how much oil would be obtained. In that connection he had tempted to prophesy; he did not expect a Baku in Trinidad; he did not expect to see such enormous productions from single wells. Fountains of oil they might have, as we had evidence of great gaseous pressure; but he believed that baling wells, giving a steady production, would be more probably the rule in Trinidad. That the oil fields would be successful the evidence he had gathered during the last two and a-half years did not allow him to doubt, but how important the industry might become was a matter upon which it would be vain to speculate at present.

At the least, a new and valuable asset of the Empire was awaiting exploitation; the time for practical and systematic work had come; there was no necessity for drilling wild cat wells through ignorance of the geological structure and the position of the oil-bearing strata, nor did they require to open up districts of primeval forest in order to test the possibilities of oil production. Even with only moderately successful results, the development of those untouched sources of mineral wealth should have the effect of placing the colony in a position of far greater importance than it had ever hitherto attained.

At the conclusion of Mr. Cunningham Craig's address several gentlemen present delivered brief speeches.

Mr. R. Rust, whose intimate knowledge of the Trinidad fields is well known, spoke of the pioneer work which had been accomplished, and the excellent opportunities which there were in Trinidad for making that island a most important station for the navy in time of war. The shipping facilities were excellent in every way, and it was an easy matter to run a pipe line for conveying the oil a few yards from the shore to the ships. He had listened to the address of Mr. Cunningham Craig with great pleasure, for he had proved from a scientific point of view that Trinidad possessed a very valuable oil field.

Mr. C. Jenkins and other gentlemen addressed the ladies and gentlemen present, after which Sir Neville Lubbock received a hearty vote of thanks for his services in the chair, this being passed on the motion of Mr. Cunnington Craig. In speaking of wild-cat wells—a subject that had been mentioned by some of the previous speakers—Mr. Craig said that those kind of wells were often of the greatest possible value to the geologist, and in Canada and America, where they had very few evidences of outcrops of oil, wild-cat wells were of the greatest value, but in Trinidad, where they had such a geological structure, wild-cat wells were of little or no importance. He was prepared to say that of the wells drilled so far in Trinidad, not one of them had been drilled within a quarter-of-a-mile of the right place.

THE EXPORT OF RUSSIAN KEROSENE.

A Paper by . . . . . .
Mr. B. URJUMTZEFF.

NECESSITY FOR DEVELOPMENT.

A paper was recently read before the Imperial Russian Society of Navigation by Mr. B. Urjumtzeff, in which he dealt exhaustively with the question of the export of Russian kerosene, and the necessity that exists for the development of such foreign trade.

The author began by demonstrating that the manufacture of kerosene is necessary for the purpose of supplying a cheap and safe fuel oil to the Russian home markets. The crude oil cannot safely be used for fuel purposes whilst if the lighter fractions were to be wasted, the cost of the fuel oil would rise in proportion. The most rational thing for the petroleum industry was therefore to distil off and market as much kerosene as possible. That the utilisation of a certain proportion of the crude oil in the form of kerosene has become a permanent and normal feature can best be shewn by the following table:—

	Production of Crude Oil at Baku, in Million Poods.	Deliveries from Baku. in Million Poods.					Residuals by Caspian Sea.	Prices in Copecs per Pood.							
		Crude Oil.	Lub. Oil.	Kerosene.				Kerosene.						Crude at Baku.	Resid. at Baku.
								London.		Hamburg.		Baku.			
				To Foreign Markets.	To Home Markets.	Total.		Russian.	American.	Russian.	American.	In Ships.	In Wagons.		
1894 ..	297·5	16·4	6·4	40:7	30·5	71·2	182·8	59·5	69·8	—	76·1	5·6	7·9	3·1	3·9
1895 ..	377·4	15·1	6·8	47·1	33·9	81·0	172·7	91·7	106·6	96·6	102·5	13·7	17·5	6·5	6·1
1896 ..	386·2	25·5	8·9	38·1	48·7	86·8	178·2	90·5	99·4	82·9	95·8	13·3	24·3	7·8	7·7
1897 ..	421·7	23·6	9·1	46·1	44·2	90·3	212·5	75·2	84·9	73·6	79 0	12·0	11·3	7·7	8·2
1898 ..	485·9	43·8	10·4	51·1	43·5	94·6	237·0	81·1	90·8	81·7	89·3	13·9	15·8	9·8	10·7
1899 ..	525·3	24·4	11·5	56·0	47·1	103·1	240·5	92·5	111·3	99·9	107·5	22·0	27·9	13·7	13·3
1900 ..	600·7	39·0	13·5	50,7	73·3	124·0	259·0	108·3	120·6	102·1	110·2	22·5	31·5	15·7	16·4
1901 ..	671·2	35·1	12·8	74·2	54·5	128 7	303·9	102·3	115·1	91·2	103·0	8·9	11·9	8·1	9·6
1902 ..	636·5	34·0	14·3	73 8	46·4	120·2	336·4	95·9	111·7	84·7	101·6	8·2	9·3	6·7	7·7
1903 ..	596·6	26·4	16·6	89·0	57·4	146 4	293·8	83·3	109·6	98·9	112·9	12·6	17·2	9·0	8·8
1904 ..	614 6	18·7	15·3	89·6	69·9	153·5	283·6	93·8	110·4	92·0	102·4	20·3	25·4	14·6	15·9

The question therefore to be considered is, what should be done with the kerosene? Its use as fuel on a large scale has been debarred by the reasons which operate against the use of crude oil for such purposes. A certain quantity could be used for internal combustion engines, but that could not be large.

There was certainly plenty of room for extending the use of kerosene as an illuminant in the interior of Russia. Statistics shewed that the consumption of kerosene in Russia was no more than 13½ lbs. per head per annum, whilst in Germany, where extensive use was also made of electricity, gas, alcohol and other methods of illumination, the consumption of kerosene was 38·7 lbs. per head per annum, or treble as much as in Russia. If the town population in Russia were excluded, the consumption of kerosene by the peasants would be reduced to 8 lbs. per head per annum.

The cause of that was the extreme poverty of the rural population, which for economy's sake burnt its oil in small lamps without chimneys, whilst some preferred to go to sleep rather than spend money on oil. Under the circumstances, any measures which might be taken to reduce the cost of kerosene to the population would be a great thing in the interests of civilisation. But how was that to be brought about? It was proposed in some quarters that the Government should abolish, or at least reduce, the 60 copecs excise duty which it now levies on kerosene used in Russia, but the author doubted whether that would sufficiently influence the consumption of oil. The cost of the kerosene to the peasant in the village, including the 60 copecs duty, is from 1·50 to 1·80 roubles per pood. The excise duty therefore represents only about 40 per cent. of the price. In the present financial condition of Russia, where new sources of revenue are eagerly looked to, the Government is scarcely likely to reduce this duty, not to speak of abolishing it. Assuming, however, that the duty would be entirely abolished, the consumers would be scarcely able to benefit to the full extent of it, and assuming even that, it could not be expected that the consumption would promptly increase in proportion to the reduction in price. An increase in the home consumption by even 40 per cent. would bring the total quantity up to 70,000,000 poods, whilst the annual output of kerosene is 150,000,000 poods, and there would thus still be left a surplus of 80,000,000 poods to be disposed of. The result of all such arguments is that the export of kerosene is an absolute necessity not only for the petroleum producers and refiners, but also in the interests of the Russian consumers.

To people not acquainted with the petroleum industry, it may appear, continues the author, that the export is as simple a matter as the export of other goods, such as timber, corn, etc. The idea is quite erroneous. Whilst for the export of corn, for instance, no special appliances are required: the corn is carried in ordinary railway trucks, stored in ordinary warehouses, and shipped in ordinary cargo boats. In order to be able to carry on an export trade in petroleum, special vast and costly installations are required. There were times when petroleum was handled in barrels, and these latter could be carried in ordinary trucks and ships, like any other merchandise. But those times have gone for ever, and the petroleum export trade can only be carried on now in bulk. By rail it has to be carried in special tank waggons, at the export port it has to be stored in specially-erected huge iron tanks, of from 4,000 to 5,000 tons capacity, and for transportation to foreign ports, special tank steamers, of an average capacity of 5,000 tons each, have to be employed. For the transmission of the oil from the tanks to the steamers, have to be provided networks of pipe lines, with necessary pumps and other appliances. Further, the petroleum exporter has at the same time also to act as importer and distributor of his oil on the foreign markets.

The Russian petroleum exporters, in order to compete successfully with competitors, were compelled to adopt the methods of the Standard Oil Co., and organise their own system of distribution direct to the retailers. This involves the erection of large storage installations at the ports, the construction of tank waggons for carrying the oil into the interior, the erection of smaller storage installations at the principal centres of consumption, the provision of road tank cars and horses for distribution to the retail shops, etc., etc.

When all these things were provided, the task of the oil exporter was not completed; it was still left to him to find buyers for his oil, which was the most difficult part of his problem. Russian kerosene differs in quality from American, and does not burn well in lamps adapted for the latter, and at first foreign consumers would not look at Russian oil. To overcome this difficulty, therefore, the Russian exporters had to design the best burner for burning Russian kerosene, manufacture it, and supply it cheaply to the consumers. The consumers, however, were satisfied with American oil, and were reluctant to change over to Russian, even at the low price at which it was offered to them. In England, Russian oil has gained a footing more rapidly than elsewhere, but in Germany for a long time they could make no headway, and in order to make an impression at all on the market, they had to give away their special burners free of charge. Lately the situation has been further complicated by the increased competition on the European markets of Roumanian and Galician oil. These last-named countries have a great advantage in their close proximity to the consuming markets. The European markets have now become altogether too small to accommodate the exporter of the different producing countries, and the price of oil has declined enormously, and the Russian exporters in particular are losing very heavily. If the export of oil from Russia continued at all, it is due to the great efforts of the exporters to retain some hold on the markets, in the hope of a better future and in the prospect of saving the money which they have already invested in their export organisations. The three principal companies for distributing Russian oil—the Consolidated Petroleum Co., Ltd., and the Homelight Oil Co., Ltd., in England, and the Deutsch Russische Naphtha Import Gesellschaft—have between them absorbed more than 10,000,000 roubles of Russian capital.

In view of the talk in certain quarters of the great profits earned by the kerosene exporters, the author goes exhaustively into figures of the expenses connected with the export and the prices realised. In their petition to the Government for a reduction of the rate for export kerosene on the Transcaucasian Railway, the Council of the Baku Petroleum Association represent the expenses connected with the export of Russian kerosene and marketing the same in London as follows:—

	Copecs per pood.
Expenses at Batoum	3
Sea freight, etc.	11
London expenses, including barrels	34·5
Total	48·5

Although two-thirds of the oil trade in England is now done in bulk, the quotations in London are still including barrels, and therefore, in order to arrive at the net amount realised for the oil, the cost of barrels must be taken into account.

The author considers that the above figures of expenses given by the Council of the Baku Petroleum Association are under-estimated, and in his turn gives the following figures of expenses, which he considers nearer the truth:—

	Pence per gallon.	Copecs per pood.
Lighterage and wharf expenses ..	0·06	1·0
Storage and amortisation of installations	0·14	2·4
Discharge of steamers and barrelling	0·13	2·2
Cost of barrels	1·75	30·2
Office expenses	0·19	3·3
Sea freight, leakage, and insurance ..	0·62	10·7
	2·89	49·8

The price of Russian kerosene in London in June, 1905, was 83·6 copecs per pood. By deducting the above 49·8 copecs, he arrived at the price realised f.o.b. Batoum, 33·8 copecs. Deducting from this again 3 copecs expenses at Batoum, and 79 copecs railway freight from Baku, we find that the oil clears 11·8 copecs per pood at Baku. In reality, the author further points out, the expenses in London are much larger than the above figure, which refers solely to oil sold in barrels. But two-thirds of the oil sold in England is now distributed in bulk, and the expenses on this are heavier than on barrel oil, and work out as follows:—

	Pence per gallon.	Copecs per pood.
Lighterage and wharf charges	0·6	1·0
Storage and amortisation of installations	0·14	2·4
Office expenses	0·19	3·3
Sea freight, leakage and insurance ..	0·62	10·7
Cost of barrels	1·75	30·2
Distribution among small depôts, cost of maintaining same	1·08	18·6
	3·84	66·2

Taking the proportion of bulk oil to barrel oil as 2 to 3, the average expenditure on a pood of Russian kerosene distributed in England works out as follows:—$(66{\cdot}2 \times 2 + 49{\cdot}8) : 3 = 60{\cdot}7$ copecs. This figure brings the amount realised f.o.b. Batoum to 22 9 copecs, and at Baku to only 0·9 copecs per pood. It is clear that the export trade cannot continue indefinitely under such conditions.

The author then proceeds to consider the conditions under which the Russian kerosene export trade could be carried on without loss, and for this purpose endeavours to arrive at the cost of kerosene to the refiner at Baku, which, however, can only be got at approximately, for we have to take into account the cost of crude, the price of residuals, lubricating oils and of kerosene sold for home consumption, etc. Even the cost of the production of crude oil can only be arrived at approximately. For his calculations, the author takes the figures of the Council of the Baku Petroleum Association, which sets down the average price at which crude oil can be sold without loss at 12 copecs, and residuals at 13 copecs. To produce one pood of kerosene 3¼ poods of crude oil have to be distilled, and the refinery treatment costs at least 4 copecs per pood; the normal cost of a pood of kerosene works out at 17 copecs. Adding to this 22 copecs railway rate to Batoum, 3 copecs expenses at Batoum, and 60 copecs expenses in freight and distribution in England, we find that in order not to lose, the exporters must realise in London for their oil 99 copecs per pood, or 5¾ pence per gallon, and the moment the price falls below that figure they begin to trade at a loss.

For Germany the amount of expenses falling on kerosene may be approximately the same as in England, for although the more expensive distribution in bulk is not so widely adopted there as in England, on the other hand the local rates and taxes are much heavier.

In order to shew the need for a reduced export railway rate, the author proceeds to examine in detail the conditions under which Russian kerosene has to compete with the oil of other countries.

During the period from 1894 to 1900, the Russian petroleum industry progressed very rapidly, and increased its output from 4 983,000 tons to 10,387,000 tons, or by 108 per cent., whilst its principal competitor, America, during the same period increased its output only from 6,528,000 to 8,417,000 tons, or 29 per cent. From 1900, however, the position was reversed, and during the period 1900 to 1904, whilst the Russian petroleum output remained practically stationery, America—owing to the discovery of new fields in Louisiana, Kansas, Colorado, Texas, and California—increased its output by 87 per cent. The predominating position of the American petroleum industry was further strengthened, and with it increased the difficulty of the Russian oil trade in competing with it, which is reflected in the increased difference between the price for American and Russian oil on the London market. From 12–13 copecs per pood in 1900-1901, this difference in 1903 went up to the enormous figure of 26 copecs per pood. The American exporters have made such progress in extending and perfecting their organisation that the only means left to the Russian exporters to compete with them was to lower their prices. This advantage will on the average amount to 25 copecs per pood, which will make it an easy matter for Galician oil to displace Russian.

The position of the Russian kerosene in the East is equally bad. We have spoken already of the development of the petroleum production in India, Sumatra, Java, and Borneo. The two years' war with Japan has dealt a heavy blow to the Russian kerosene trade, which was taken advantage of by the American exporters. The Japanese market, for instance, which in 1902 took 3,500,000 poods of Russian kerosene, is now lost entirely to Russia.

As a result of the many unfavourable conditions, the export of oils from Russia has during the last three years declined enormously, and at a much greater extent than the decrease in output of crude oil at Baku. The Russian petroleum exporters are now confronted with the task of regaining the markets lost by them during the last two years. The task is an exceedingly difficult one, and unless something is done to lighten its difficulties, it may prove beyond the powers of Russian exporters.

The only measure which could give prompt and effective support to the Russian petroleum export trade would be a reduction in the railway tariffs on export oil, and the greater the extent of this reduction and the more permanent the nature of the same, the better will it be for the petroleum industry, and indirectly also for the Russian consumers.

The objections which are made against the reduction in the export railway rate are, first, that the prices of oil in London are not quite so bad now as they were in 1894 and 1897, when the railway rate was temporarily reduced, and that such reduction would mean a great loss to the Government. To this opposition the author replies that increase in the cost of distribution which has since taken place counterbalances the advantage in price, and if we take further into account the increased price of crude oil at Baku, brought about partly by natural cause and partly by excessive royalties levied by the Government of their petroliferous lands, we find that the exporters are now in a worse position than they ever were before.

The second objection is that the lowering of the railway rate to 9 copecs would, on an export of 80,000,000 poods, mean a loss in revenue of 8,000,000 roubles and a reduction to 12 copecs—a loss of 5,600,000 roubles. This is certainly a serious matter in the present state of Russian finances, but under the circumstances it appears to be the lesser evil. Should the present rate be maintained, the export must of necessity decline, and the Government will, in any case, lose on this reduced traffic. The reduced export will further, by reducing the profits of the business, bring about if not an actually reduced output, at least retard its development, and thus serve to enhance the price of oils sold on the home markets. The Government has to annually purchase over 100,000,000 poods of residuals for its railways, and every 2 copecs attached to the price of residuals means an expenditure of 2,000,000 roubles to Russian industry, and 1,000,000 roubles to the Russian Government.

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PRODUCTION OF CRUDE OIL IN GALICIA BY FIRMS IN APRIL.

The production of crude oil during April in the Galician oil fields by the principal firms was, according to *Naphtha*, as under :—

	Tons.
Hekla	6,118
Klaudyusz	6,000
Karpathen Co.	4,535
Schodnica Co.	3,935
Litwa	3,300
Boryslaw Syndicate	3,200
Urycz Co.	2,600
Grymajlo	2,471
A.G. fur Naphta-Industrie	2,095
Savings Bank	1,750
Banzaj	1,710
Dr. Stefan Freund	1,657
Laupenmuhlen	1,530
R. E. Clay	1,470
Sesam	1,230
Parkinson	1,220
Fanto and Co.	1,050

LATEST FROM RUSSIA.

BATOUM PETROLEUM EXPORTS IN APRIL.

The total exports of petroleum products from Batoum in April amounted to 3,114,000 poods, which is less than half of the normal monthly figure. The main cause of the smallness of the export, and practically the only cause, was the inactivity of the pipe line. It is sufficient to point to the figures for kerosene, which was only 1,816,000 poods, or 60 per cent. less than the normal quantity. The best demand during the month was for lubricating oils, but there was a considerable shrinkage in the trade in solar oil.

The movements of petroleum products at Batoum in April are given in the following table (in poods):—

	Arrivals from Baku.	Shipments.	Stocks on 1st May (o.s.)
Light refined kerosene..	1,566,000	1,816,000	2,112,000
Kerosene distillate ..	—	—	18,000
Solar oil..	164,000	64,000	789,000
Machine oil	469,000	781,000	456,000
Spindle oil	70,000	44,000	120,000
Cylinder oil	12,000	19,000	20,000
Vaseline oil	—	73,000	40,000
Lubricating oil distillate	—	113,000	24,000
Residuals	243,000	204,000	329,000
Total	2,524,000	3,114,000	4,008,000

The export of machine oil was considerably in excess of the deliveries of this product from Baku, and in consequence the stocks declined by 40 per cent. against the stock on 1st April (o.s.). The deliveries of kerosene from Baku were also very small, compared with the deliveries in March. The exports of oils to different countries have also suffered considerable changes. Thus to Russian home ports there was shipped in April only one cargo in bulk of 126,000 poods, whilst to England there were shipped only 645,000 poods. Under the influence of the increased exports of lubricating oils, the shipments in April to Dutch and Belgian ports went up 629,000 poods; to Germany there was exported 310,000 poods, and to France 141,000 poods. There was recorded a considerable increase in shipments to Alexandria in April, which altogether amounted to 724,000 poods, all in bulk. To Turkey and the Balkan States there was exported 245,000 poods of kerosene, in cases.

THE TCHIMION OIL FIELD.

A correspondent at Tashkent writes to the *Trade and Industry Gazette* to the effect that the Tchimion oil wells cover an area of 812 acres. There are altogether 10 derricks, of which five are baling and five in course of drilling. The average daily output of crude oil is about 30,000 poods. The wells are connected with Vannovskaia railway station by means of a pipe line about 12 miles long. A refinery is now being erected at Vannovskaia. The benzine distillery is already working, and is used to distil off the benzine from the crude, in order to produce a safe fuel oil. The kerosene section will start working in September. The refinery is designed to treat 10,000,000 poods of crude oil per annum. The illuminating oil from the Tchimion refinery could easily supply all the needs of the Turkestan province. The Baku kerosene of Nobel Bros. is sold at Kokand at 1 rouble 60 copecs per pood, whilst Tchimion kerosene can be sold at 1 rouble 20 copecs. Tchimion crude oil, with a flash of 45° C., is sold at 25 copecs per pood; whilst crude, with a flash of 70° C., is sold at 28 copecs per pood. The company operating at Tchimion is annually supplying 2,500,000 poods of crude oil to the Central Asian Railway.

EXPORTS OF RUSSIAN PETROLEUM PRODUCTS.

STATISTICS FOR JANUARY—MARCH, 1906.

The exports of petroleum products from Russia *via* the European frontier and the Caucasian Black Sea ports, according to the customs statistics, in the first quarter of 1906 were:—

	1st Quarter, 1905. Poods.	2nd Quarter, 1906. Poods.
Illuminating Oils, Heavy Benzine, etc. (total)..	14,945,000	4,672,000
Including—		
Via Warsaw	82,000	53,000
,, Reni	105,000	105,000
,, Novorossisk	5,670,000	1,022,000
,, Batoum	8,813,000	3,343,000
Not including—		
Via Baku	399,000	268,000
,, to Finland	84,000	23,000
Lubricating Oils, Unrefined (total)..	432,000	923,000
Including—		
Via Sosnovice	37,000	58,000
,, Batoum	361,000	826,000
Lubricating Oils, Refined (total) ..	1,403,000	283,000
Including—		
Via Riga	30,000	63,000
,, Odessa	1,000	7,000
,, Batoum	1,196,000	50,000

BATOUM PETROLEUM SHIPMENTS.

The shipments of petroleum products from Batoum during the week ended May 27th (o.s.), were as follows:—

	Illuminating oil.		Other products.	
	1905.	1906.	1905.	1906.
To Europe	552,000	763,000	426,000	222,000
To the East	33,000	29,000	2,000	—
To Russian Ports	105,000	208,000	6,000	2,000
From Jan. 1st to May 27th:—				
To Europe ..	9,820,000	5,178,000	3,956,000	3,055,000
To the East ..	6,525,000	1,574,000	290,000	23,000
To Russian Ports	1,710,000	1,569,000	71,000	110,000

AVERAGE PRICES AT BAKU.

The following were the average prices of petroleum products at Baku for April, according to the figures of the Baku Exchange Committee:—

	Copecs per pood.
Light crude oil in Black City	25·8
,, ,, ,, ships	26·6
Heavy ,, ,, ,, ...	26·0
Residuals in ships	28·6
Kerosene ,, ...	28

RUSSIAN NOTES.

The Volga.—The navigation on the Volga is for the present proceeding smoothly, but there are already signs of approaching low water and consequent complications in carrying out the shipping programmes.

It is Reported from Batoum that the pipe line station there is now receiving kerosene in through tank waggons from Baku, to the extent of 30 to 40 daily, which has enabled it to somewhat increase deliveries to exporters.

Case Factory Re-opens. — The management of the Mantascheff case factories at Batoum proposes to re-start the works in course of the present month. More than 500 men have so far agreed to work there.

Free Land Grants.—It is reported that under the influence of the rumours of the coming wholesale grants of land to peasants, workmen employed at the Baku oil fields and refineries are leaving in large numbers for their homes in the interior.

The Aramazd Company, operating at Baku, has completed its fourth financial year 1904-5, with a profit of 26,690 roubles, against one of 1,393,780 roubles in the preceding year. This enormous difference is due to a falling off in revenue from 1,844,963 roubles to 926,608 roubles.

Photol.—At the tariff conference of Russian railways, it was resolved to extend the special rates accorded to kerosene, also to a product called photol. This product represents kerosene, mixed with heavy benzine, and has a specific gravity of 800-820, and a flash of no less than 20° C.

Liquid Fuel.—The high prices now ruling in Russia for liquid fuel have caused some of the liquid fuel consumers to go over to coal. In Moscow alone, five firms are mentioned as having taken this step, and these firms in themselves consumed about 3,150,000 poods of liquid fuel per annum.

The Sequel to the Russian New Law.—As a result of the new Russian law extending the excise duty to petroleum products other than kerosene, heavy solar oil used mainly for motor purposes, is about to disappear entirely from the market, unless a way is found to prepare it within the technical limits which would allow it to escape duty.

Russian Interior Shipments.—According to the statistics of the Astrakhan port authorities, from the opening of navigation to the 1st of May, 1906, there were shipped from Astrakhan up the Volga 36,280,855 poods of petroleum products, as against 47,836,333 poods in the corresponding period of 1905, and 52,402,723 poods in 1904.

To Escape the Duty.—Manufacturers of axle grease in Russia are at the present absorbed in the question of preparing a special mixture of petroleum oils entering into the composition of axle grease, which would escape the newly-imposed excise duty of 60 copecs per pood. For this purpose the mixture has to have a a viscosity below 5 minutes at 50° C.

A Disastrous Year.—The Soutchastniki Petroleum Co., operating at Baku, during 1905 incurred a loss on their operations of 474,121 roubles, against a profit of 189,891 roubles earned in 1904. The loss is due to the increase in working expenses by 300,000 roubles, or 100 per cent., against 1904. For 1904, a dividend of 7 per cent. was distributed on the capital of 2,000,000 roubles.

Concessions at Chatma.—The following concessions have been recently granted for the exploitation of petroleum at Chatma, in the province of Tiflis:—The Iveria Petroleum Co., on plots Nos. 258 and 275, each of 27 acres; to Mr. V. Maikoff, plot No. 554, of an area of 6·4 acres; to Mr. G. Hegele, plot No. 1,821, of an area of 7·2 acres; and to Mr. A. Isaian, plot No. 3,043, of an area of 27 acres.

Russia's Foreign Coal Duty.—The Odessa Exchange Committee has petitioned the Russian Government for a reduction by half (from six to three copecs per pood) of the import duty on foreign coal. The motive of the request is the rise in price of Russian coal, as a result of the combination of a strong group of coal owners, who have increased the price of coal to 15 copecs per pood, which has placed the shipping companies on the Black Sea and the Sea of Azoff in an exceedingly difficult position. Apart from this, the recurring strikes at the coal mines, the decline in output, and the consequent reduction in the quantities of coal coming to the port of Mariupol threaten to bring about a coal famine this summer.

ROUMANIAN NOTES.

The Campina-Moreni Co. has struck oil in a new well at Moreni, and their well No. 1 has also resumed flowing.

Damage.—A fire which broke out on the property of the Roumanian United Petroleum Co. in Baicoi caused damage to the extent of 14,000 to 20,000 francs.

Property Transfer.—The Campina-Moreni Co. has acquired the petroleum property of the Campina-Poiana Co., a Dutch concern, at a price of 400,000 francs, exclusive of inventory.

The Spouter at Baicoi continues to flow with a steady yield, which exceeded all expectation. For days it has been yielding 1,000 tons daily. The sand has been cleared out, and it now yields pure oil.

The Steaua Romana's Plant.—The new electric power installation and the sulphuric acid plant, which the Steaua Romana is erecting at Campina, are nearing completion, and will shortly commence working.

Land Transfer.—Messrs. Ruzicka, Elias and Taubes have sold to Mr. Raky, acting for the International Boring Co., 62½ acres of land at Baicoi at the price of 300,000 francs and 10 per cent. royalty on the production.

Roumanian Refineries Output.—The output of the Roumanian refineries in April amounted to 9,238 tons of benzine, 16,296 tons of kerosene, 3,083 tons of lubricating oils, and 28,287 tons of residuals, in all, 56,904 tons. During April, the refineries delivered for home consumption 19,008 tons of various oils, of which 17,285 tons were residuals.

Constantly Growing—The production in Roumania is continuously growing. A number of prolific wells have been completed recently, whilst a further number are on the point of striking oil. Work on new wells at Baicoi is proceeding with extraordinary activity. Speculation in land at or near Baicoi has reached fever heat.

The Montana Co., which is owned by Messrs. Ruzicka, Elias and Taubes, and Loewenbach and Blumann, has taken over the property of the Nederlandsche Rumeensche Petroleum Co., situated at Tzinta. This property now produces 180 tons of crude oil per month. The Montana Co. propose to increase the output by sinking a number of new boreholes.

Mr. Raky's New Company.—All the petroleum properties recently acquired in Roumania by Mr. Anton Raky have been transferred by him to the Regatul-Roman Co., the capital of which it has now been resolved to increase from 500,000 to 16,000,000 francs, which will be made up of German and French capital. Three German banks are participating in this scheme with very large sums.

To Develop in Prahova.—A new company has been formed in Roumania, under the title of La Petrolifera, for the exploitation of petroleum. The company has acquired some lands belonging to Dr. Costinescu, and situated in the Prahova district. The nominal capital is 2,000,000 francs. Among those who have already taken shares in the company are Mr. E. Costinescu, Prince Stirbey, Mr. Blank, T. Cantacuzene, E. Ghica, and others.

The Problem of Residuals.—In order to assist the petroleum industry by providing a market for the residuals, which are now overburdening the refining companies, the Roumanian Government has ordered that all the vessels of the Government fleet on the Danube, as well as on the Black Sea, shall be fitted up for burning liquid fuel. This is expected to provide an outlet for 70,000 to 80,000 tons of residuals per annum, and will thus solve the residuals problems.

An Important Provision.—In the new law dealing with the tax on refined petroleum, there is a provision that illuminating oil for export shall have a minimum specific gravity of 0·822 at 15° C., and a flash point of 69·8° F. Several petroleum exporters have protested against this minimum specific gravity, which will seriously hamper their operations. The Minister of Finance has agreed to ask Parliament to modify the law by omitting the requirement of a minimum specific gravity.

The Roumanian Refiners' Cartel.—The negotiations which are still continuing between the Roumanian petroleum refiners for the renewal of the cartel have not yet led to any result. The price of illuminating oil has declined, but no important deals are taking place under the existing market conditions. Strenuous efforts continue to be made in order to arrive at an agreement. Some difficulties have been smoothed over, others have cropped up, and the result is therefore difficult to foretell.

THE BORNEO OIL FIELDS.

SOME INTERESTING DETAILS.

The *Trade and Industry Gazette* has just published a number of details concerning the oil fields in Borneo.

The writer of the article states that the petroleum among fields in the Sunda Islands, which have already taken up a definite position in supplying the markets of the Far East with oil, Borneo is playing an important part as a result of the perfect organisation of the oil fields and refineries. Last year, thanks to the reduced competition of Russian oil, the shipments of kerosene from Borneo went up to 6,300,000 poods, as against 5,000,000 poods in 1904, and only 1,000,000 poods in 1903. The expectations of those interested in the Borneo oil industry have, however, not yet been realised to their full extent, since notwithstanding the complete absence of Russian competition, they have not succeeded in disposing of all their oil, so that for the time being the wells and refineries have had to be shut down, whilst on the other hand the abundant yield of the wells and insufficient storage accommodation has compelled the management to allow some of their oil to run to waste.

Even in April of this year work was still proceeding very slowly. Apart from inadequate organisation, the main cause of the over-production and comparatively slow development of the local consumption is in the low quality of the burning oil. Having a specific gravity of 0·840-880 and a flash-point of 25° C., the illuminating power of the kerosene is 16 to 20 candle power. Only the kerosene obtained from the crude oil of the Balik Pappan concessions has some resemblance to Baku oil but of this oil there is now produced very little. The bulk of the oil obtained is from the Sanga-Sanga field, and partly from the Louis concession, and possesses these drawbacks, for it yields a small illuminating power and there is great falling of the flame up to 30 per cent. in course of burning. Therefore the oil can only find a market among the native consumers in India and China, where primitive camps without chimneys are in use, in which all kerosenes burn, or rather flicker, alike. The low quality of the oil will, therefore, for a long time keep it out of the more civilised markets, and there is every reason to believe that with the return of the Russian oil trade to normal conditions, it will, without great difficulty, regain the market which it has lost in the East. The difficulty with the benzine is also great, for there is no adequate market for the product, which, therefore, has to be burnt.

Strenuous efforts are, however, now being made with a view to remove, or at least investigate, these disadvantages. The Borneo refinery is being extended and remodelled to enable a better quality of kerosene to be produced, and storage accommodation is being erected to enable a larger stock to be kept in hand in case of difficulty in marketing. When the work of extending the refinery in Borneo is completed it will have 30 stills, capable of treating up to 80,000 poods of crude oil per 24 hours. Of acid agitators there are four of a capacity of 6,000 poods each, and the tanks and earthen reservoirs for storing various oils have an aggregate capacity of 6,000,000 poods.

THE BIBI-EYBAT PETROLEUM COMPANY, LIMITED.

DIRECTORS' REPORT.

The report of the directors of the Bibi-Eybat Petroleum Co., which will be presented to the annual meeting of shareholders to be held at the offices of the company next Thursday, states that in the circular letter by the board in December last, the shareholders were informed of the grave results of the riots and strikes which prevailed during a considerable part of the year, and now that the accounts for the year's working had been made up, the serious consequences of those disturbances have become even more apparent. Under the prevailing conditions of diminished output and increased expenses, the cost of production was very greatly raised, and went far to counter balance the rise in selling prices which was the result of the diminished production of the Baku field. Under these circumstances, continues the report, the directors regret that the profits of the Russian Company have not even been sufficient to wipe off the debit balance existing at the beginning of the year.

Up to August 20th, the production from the company's wells was fairly satisfactory in spite of the various disturbances. The total production from January to August 21st amounted to 7,378,300 poods, or about 31,666 poods daily, but the August troubles produced a complete and prolonged stoppage of work, and in consequence, the wells became completely out of order. Owing to that cause their production from September 1st to the end of the year only averaged 12,041 poods daily, during which time the expense were abnormally high, and absorbed the larger part of the profits previously made.

At the beginning of the year the stocks on hand amounted to 122,494 poods, and the total production for the year was 8,848,300 poods, thus making 8,970,794 poods. From this quantity should be deducted 845,100 poods, used for fuel purposes, 3,421 poods leakage, and 7,731,489 poods sold and delivered, including the Government share of 40 per cent. royalty, which left the stocks on hand at the end of the year at 390,784 poods.

During the twelve months, three new wells were started on the company's properties, so that the total number of wells on the properties now amounts to 30, of which two are in process of deepening and cleaning. In all, 487 sagenes were drilled during the year.

The gross profit of the Russian Company to the 31st December, 1905, o.s. (after charging 34,274·60 roubles for loss by the fires in August, 1905), amounted to 176,831·57 roubles, and after deducting therefrom amounts placed to reserve and depreciation, taxes, &c., of 77,400·30 roubles, there remained a net profit of 99,431·27 roubles, which altogether with the balance carried over from 1905, shewed a total net profit in Russia of 100,027·12 roubles, out of which the English Company has received a dividend of 100,000 roubles, or £10,542 19s. 3d.

The debit balance in the books of the English Company on the 13th January, 1905, amounted to £9,158 14s. 11d., and after adding interest, sinking fund of debentures, and London expenses, there remained a total debit balance of £21,646 19s. 7d.

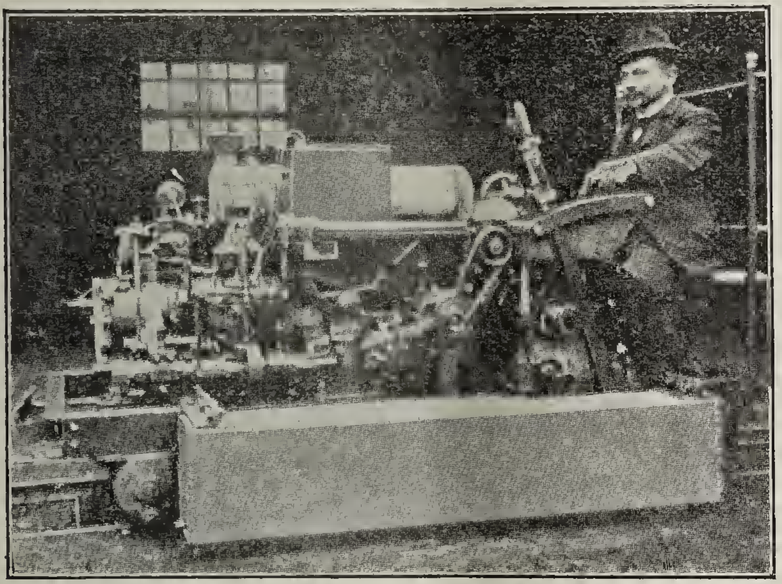
Deducting therefrom the above dividend of £10,542 19s. 3d., and the interest on loans, etc , £2,342 3s. 8d., there remained to be carried forward a net debit balance of £8,761 16s. 8d.

The directors regret to report the death of their colleague, Mr Alexander Koch. Mr. Koch, who, in virtue of his character and financial connections, was a man of great influence in St. Petersburg, always displayed an untiring zeal in the interests of the company.

Mr. Von Ofenheim retires from the board of rotation, but offers himself for re-election.

BENZINE LOCOMOTIVES FOR MINING PURPOSES.

Mr. F. C. Perkins, in an illustrated article in the current issue of *Mines and Minerals*, deals at some length with the utility of benzine locomotives for mining purposes, this form of power having been wonderfully developed during the past few years. The accompanying illustration shews the interior construction of a benzine locomotive for mines, the outside cover being removered, while Fig. 2 shews a 6 horse-power benzine locomotive hauling a train of cars from the mouth of the mine of the Giessener Braunscein Werke, formerly C. W. Ferni, at Giessen, Germany. This engine hauls cars which weigh when empty 3·312 tons, and when loaded, 9·912 tons, the net capacity of these cars being 6·6 tons. The locomotive operates 10 hours per day, hauling these trains on grades of 1 in 50 on trips varying from 320 metres to 1,050 metres in length. The net capacity per trip is 54 ton-kilometers, the consumption of fuel being 6 kilogrammes per trip or ·11 kilogrammes per ton-kilometer, while the cost of operation for benzine is 2·2 pfennig per ton kilometer. (1 pfennig=·238 cent United States money).

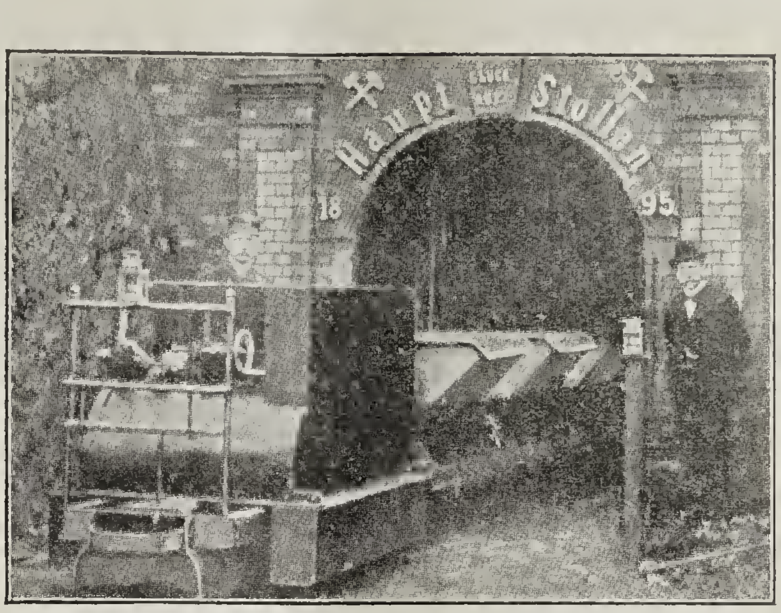


A Benzine Locomotive.

There are two 8 horse-power benzine locomotives of this type in operation in the coal mines at Kohlscheid b. Aachen operated by the Vereinigungs-gesellschaft fur Steinkohlenbau im Wurmrevier. These locomotives, operating on a line 780 meters long, haul 17 cars.

The fuel consumption is 12·6 kilogrammes, and the locomotives haul trains of cars weighing 5,950 kilogrammes empty, and 21,250 kilogrammes loaded. There are nine 8 horse-power alcohol locomotives in operation at Miesbach by the Oberbayerische Actiengesellschaft fur Kohlenbergbau. These locomotives operate on a grade of 1 to 333 for 10½ hours per day with a fuel consumption of ·1101 kilogramme per ton-kilometer and a daily capacity of 205 ton-kilometers. These spirit locomotives are constructed at Cologne at the works of the Gasmotorenfabrik Deutz, and are extensively used not only for mine haulage but also at cement plants, iron and steel works, and machine shops for yard service.

There are still two larger locomotives of similar construction of 12 horse-power capacity in operation at Grube Fentsch at Algringen in Lothr, Germany, by the Bochumer Verein. These benzine locomotives are operated on 10-hour shifts for mine service over lines of 700 metres in length, with grades of three per cent. They haul 16 cars, and consume ·05 kilogramme of fuel per ton-kilometer, making a net cost of 1 pfennig per ton kilometer, for gasolene. In order to make a comparison with the low cost of operation of these locomotives for mining service as compared with animal power, it may be stated that the cost of the latter varies from 10 to 20 pfennigs per ton-kilometer, while rope haulage is said to cost from 7 to 8½ pfennigs, with 300 tons capacity and 1,000 metres length of haul.



In Practical Use at a Mine.

* * *

OPERATIONS OF THE ROUMANIAN PETROLEUM COMPANIES.

At the end of this month the annual meetings will be held of most of the leading petroleum companies in Roumania. Our well-informed contemporary, the *Moniteur du Petrole Roumain*, in anticipation of the reports about to be published, gives brief particulars of the operations of those companies in the past financial year.

The meeting of the Bustenari Co. will take place in Bucarest on the 30th June. The balance-sheet made up to the 31st March, 1906, shews a profit on the year's operations of 2,282,548 francs. The directors have decided to write off 878,692 francs for depreciations, and apply the rest to pay a dividend of 20 per cent. on the preference shares and 8 per cent. on the ordinary shares. Last year the dividends were 20 per cent. on the preference, and 5 per cent. on the ordinary shares. The production of crude oil on the company's properties in the past financial year was 190,871 tons, against 76,905 tons in the preceding financial year.

The Credit Petrolifer will also hold their meeting on the 30th June. This company, which was formed by the Disconto Bleichroeder Banking group for trading in Roumanian oils, shews for its first financial year a net profit of 194,204 francs, which will be applied for paying a dividend of 8 per cent. on the capital of 3,000,000 francs. The meeting will be asked to sanction an increase of the company's capital by 2,000,000 francs, with a view to extending the company's installations.

The Vega Refining Company, in its balance-sheet for the financial year 1905-6, shews a profit of 207,000 francs. The company's refinery was only working in the last four months of the financial year, the first eight months being taken in construction. A dividend of 5 per cent. will be declared, and 91,000 francs applied for reserve fund.

The annual meeting of the Campina Moreni Co. will be held at Bucarest on June 30th. The balance-sheet covers the 18 months ending 31st December, 1905, and after writing off for depreciations, shews a profit of only 116,348 francs. The nominal capital of the company is 5,000,000 francs, and in addition there are creditors to the extent of 2,482,871 francs.

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company.	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{11}{16}$-$\frac{13}{16}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	3/3-3/9
,, ,, ..	£650,000 $5\frac{1}{2}$% Pref.	£1	7/0-7/6
Bibi-Eybat Petroleum Co. ..			10/0-11/0
Californian Oilfields	£250,000 Ord.	£1	$5\frac{5}{8}$-$5\frac{7}{8}$
European Petroleum.. ..	£550,000 Pref.	£1	2/6-3/6
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	84-87
Russian Pet. & Liquid Fuel ..	£500,000 $6\frac{1}{2}$% Pref.	£1	11/0-13/0
,, ,, ...	£600,000 Ord.	£1	11/0-12/0
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	$3\frac{3}{4}$-4
,, ,, ...	£575,000 Ord.	£1	8/9-9/6
Shell Transport & Trading ..	£2,000,000	£1	28/6-29/6
,, ,, ,, ..	£1,000,000 Pref.	£10	$9\frac{3}{8}$-$9\frac{5}{8}$
Spies Petroleum Company ..	£312,500	10s.	8/3-8/9

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on June 18th.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	570	575
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	3,700	3,800
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	145	147
Neft Co.	250	—	—
Nobel Bros.	5,000	8,750	8,850
,, ,, ...	250	—	—
Rops and Co., V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 21st June, 1906, as follows:—

The condition of the tin plate trade is still deplorable. Owing to the continued fall in the tin market and dearth of orders for tin plates, prices are again easier, and it is quite impossible to obtain large orders at figures which will cover cost, consequently a large number of mills are still idle, and the workpeople are—in some districts—suffering severely. There are wide differences in makers' quotations according to their position—thus, whilst low prices are being accepted for stock plates and early delivery, much higher rates are, in many cases, quoted for forward. Approximately, prices are to-day as under:—

IC	$18\frac{3}{4} \times 14$	124 sheets	110 lbs.	13/0 to 13/3 per box.
IC	$19\frac{1}{4} \times 14$	120 ,,	110 ,,	13/0 to 13/3 ,,
IC	20×10	225 ,,	156 ,,	18/3 to 18/6 ,,

F.o.b. Wales. Tin lining and iron hooping extra.

SCOTCH COMPANIES.

Supplied by Messrs. MACLEAN AND HENDERSON, STIRLING.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. $8\frac{1}{2}$ pd	£199,750	£10	$17\frac{5}{8}$
Do. 6% Cum. Pref. ..	£100,000	£10	$12\frac{3}{8}$
Burmah Oil, Ord.	£1,100,000	£1	54s. 3d.
Do. Pref.	£250 000	£1	25s. 6d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	$8\frac{1}{4}$
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	$17\frac{1}{2}$
Do. New (£8 10s. pd.)	£131,750	£10	18
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	92s. 0d.
Do. 6% Cum. Pref.	£100,000	£10	$12\frac{3}{8}$
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	30
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	64s. 0d.
Do. "B" Deb...	£150,000	£100	$152\frac{1}{4}$

DUTCH COMPANIES.

Company.	Quotations June 7th.	Quotations June 14th.	Florins.
Arnhemsche Petroleum Mij. ..	77	80	1,000
Aurora ,, ,, (Deb. 5%)	$90\frac{3}{4}$	$90\frac{3}{4}$	—
Campina Poiana Mij...	35	35	—
Dordtsche Petroleum Mij. (Pref.) ..	126	122	500
,, ,, ,, (Deb. $4\frac{1}{2}$%)	$102\frac{3}{4}$	$102\frac{3}{4}$	1,000
Elzasser Petroleum Mij.	$2\frac{7}{16}$	$2\frac{1}{4}$	1,000
Gaboes ,, ,, ...	$19\frac{3}{4}$	$19\frac{3}{4}$	—
Holl. Rumeensche Petroleum Mij...	$32\frac{1}{2}$–$33\frac{1}{2}$	26-$28\frac{1}{2}$	1,000
Int. Rum. Pet. Mij.	$88\frac{3}{8}$	$88\frac{3}{4}$	500
Java Petroleum Mij. (Ord.) ..	30	30	1,000
,, ,, ,, (Pref.) ..	42	$42\frac{3}{4}$	—
Koninklyke Nederl. Pet. Mij. Shares	$479\frac{1}{2}$–$481\frac{1}{2}$	480–487	250-1,000
,, ,, Share certificates	480	478–482	1,000
Mœara Enim Petroleum Mij. ..	115	$114\frac{1}{2}$–115	100
,, ,, 1-1,000 Oblig. 5	102	102	250-1,000
"Moesi Ilir" Petroleum Mij. ..	$34\frac{5}{8}$	$34\frac{7}{8}$	—
Nederl.-Rumeensche Petroleum Mij.	17	$17\frac{1}{2}$	—
Nieuwe Ned. Petroleum Mij. And...	$55\frac{1}{4}$	$55\frac{1}{4}$	1,000
Oliebronnen in Hannover Mij. ..	173	170	—
,, ,, (Deb. 5 %)	$100\frac{1}{2}$	$100\frac{1}{2}$	—
Panolan Maatschappij Cert. ..	340	340	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	$123\frac{3}{4}$	$143\frac{7}{8}$	1,000
,, ,, (Common) ..	$99\frac{1}{4}$	97 x.d.	—
Sumatra-Palembang Petroleum Mij	62	61	500
Zuid Perlak Petrol. Mij. (Pref.) ..	$88\frac{1}{4}$	$84\frac{1}{2}$	—

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The Petroleum Producers at Hanover are making efforts to induce the German Government to grant reduced railway rates for German crude oil. This is asked as a set off against the reduction in import duty on foreign crude oil. The increased competition of the latter has already caused a loss to the German industry estimated at 2,500,000 marks.

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Saturday, June 23rd, 1906.

KILLING THE GOOSE THAT LAYS THE GOLDEN EGGS.

In view of the retrograde movement which through a number of cases has marked the Russian petroleum export trade of late, and caused what must now be looked upon as a general crisis to set in, the paper which was recently read before the Imperial Russian Society of Navigation by Mr. Urjumtzeff, and which appears upon other pages of this issue, has a peculiar interest. The author has dealt in a thorough manner with the important subject which is now of the most serious moment to the future of Russia's petroleum export trade, and it is to be hoped that as a result of the added publicity which is being given to the trade, the acute crisis which now faces the Russian export trade in oil may be averted.

From time to time in the Review we have dived fully into many of the questions which have collectively assisted to bring about the present most lamentable state of affairs, and so in the present instance it is only necessary that we should summarise these, and look more to the remedy to be applied, rather than dwell at length upon the short-sighted policy which has brought the country's export trade to its present condition.

At home, of course, it is old history to say that the petroleum industry has not been fostered, and we are putting it very mildly when we state that the Government has almost succeeded in strangling the petroleum export trade; it has gone very far to kill the proverbial goose with its golden eggs. In the first place, owing to the most excessive royalties which have been placed upon the shoulders of the producers, the value of the crude oil has been increased beyond a reasonable point, with the result that developments at the oil fields have been retarded, and the extension of the country's petroleum export trade has been seriously interfered with. We have pointed out that whereas in America the producers look upon a twelve per cent. royalty as exorbitant to return to the owners of the land, in Russia the forty per cent. royalty is demanded by the Government, and so from the very time the oil is once above ground, it is placed at a great discount. Thus the Baku oil trade has degenerated, and to such a degree that it has aptly been said that instead of its being run on commercial lines, it has become to be looked upon and even indulged in as a gambling speculation.

But this is only one of the points upon which the Russian Government has shewn itself desirous of hindering the healthy development of the country's vast resources. It levies an excise duty of 60 copecs per pood, or roughly 300 times the value of the oil itself, and finally—and this is the last straw—it enforces, by reason of the monopoly which it has over the railways, an exhorbitantly high tariff upon petroleum products, that the wonder really is that there is any Russian petroleum industry left at all. How it has survived is little less than marvellous. Fortunately other means than the railways are found for the interior markets, but in order to carry on the export trade, the exporters have no alternative but to pay whatever freight charge is laid by the Government to Batoum.

We have no desire to emphasise what to our mind seems clear, that the Russian Government has constantly endeavoured to strangle the industry—but their tactics of late years shew in a very bad light, when we remember that almost a quarter of a century ago, at the first meeting of the Baku-Naphtha Association, when the question of laying a pipe line from Baku to Batoum was discussed, an official of the Government admitted that by charging a ten copec rate from Baku to Batoum, a substantial profit would remain for the Government. And this calculation was based upon an export of only 30,000,000 poods per annum, and not 100,000,000 poods, as have been the figures during recent years. This, in itself, should be sufficient justification for the abolition of the present extortionate freight rate.

By crippling the industry to such an extent, it must be apparent to everyone, that the Government itself is the great loser. A diminution of the export trade, such as has now been brought about cannot but greatly reduce the profits from the transportation of oil in railway tank cars, while bringing about a decreased production has a double effect: not only does the Government lose its royalties on the crude, but it must go minus the excise duty it would otherwise receive.

But whatever necessity there has been in the past for an alteration in order to stimulate the export trade, that has never been of such great urgency as at the present time. Let us look around. Remarkable progress is being made in producing fields more favourably situated to the consuming centres of the Far East, and in this respect the position of Russia's export trade is most serious. Then the predominance of Russian oil in the Balkan States is threatened by the rapid development of the Roumanian export trade, while the Italian market is already lost to her. In London too, we find that owing to the much smaller cost of railway transport which it has to bear—about one-ninth that of Russian oil – the Roumanian product has come to stay, it being far better able to withstand the prevailing low prices. Then again, in another great consuming market—Germany—Russian oil now has to face very great and keen competition, for the special rate which it has hitherto enjoyed when passing over the German railways has now been extended to Galician oil, which will consequently have a great advantage over Russian petroleum, in fact, our latest information goes to shew that Russian oil importers are now contemplating withdrawing altogether from the German markets.

We could multiply instances if we desired to shew that even if the Russian export trade is fostered by the Government it will not have all its own way upon the great consuming markets of the world. The attitude which the Russian Government should take up is, therefore, apparent to anybody. By its petroleum export trade the Russian industry lives, since it has been long ago established that it cannot do without it. Consequently the Government should leave no stone unturned in order to assist the development of the petroleum export trade. Exhorbitant tariffs upon the State railway should be abolished, and in their place a freight rate should be fixed which will give an impetus to the export movement. The excessive royalties on production should be modified since the Government will be the great sufferer by a decreased production, and the excise duty of 60 copecs per pood would in the long run prove no disadvantage to the Government if removed altogether, for it would stimulate the demand at home.

That something must be done, and that quickly is evident, and it is not too much to hope that the Government will not still persist in blindly going forward with a policy which is bound to bring death to a most important branch of commerce.

LONDON OIL SHARE MARKET.

Friday, June 27th.

General dealing on the London Stock Exchange is still confined to the narrowest limits, even the reduction in the Bank Rate yesterday to $3\frac{1}{2}$ per cent. failing to stimulate the public. As we write the tone in the Oil Share Group is weaker, although there are not many changes to report since our last issue.

At the Mid-June settlement, the list of alterations from making up prices to that of end May shewed an irregular tendency.

The Spies Petroleum Report was considered most satisfactory, but the improvement in shares is only fractional.

On Monday week Bakus weakened to 3s. 3s. to 3s. 9d., but Russian Debentures were again in request, and rose 1 per cent. at 93-95, and on Wednesday Spies improved $\frac{1}{32}$ at $1\frac{3}{32}$-$1\frac{5}{32}$.

Thursday's only alteration was a gain of another point in Russian Debentures to 94-97, and no further changes took place in this section till Monday, when Assam oils were easier at $\frac{1}{2}$-$\frac{3}{4}$, Russian Ordinary declined 6d. at 11s. 6d. to 12s. 6d., and Schibaieff Ordinary ditto at 8s. 6d. to 9s. 6d. An exception to these depreciations was Californian Oilfields, which rose $\frac{1}{4}$ at $5\frac{1}{2}$-6.

On Tuesday Assam Oil recovered to $\frac{5}{8}$-$\frac{7}{8}$, but on Wednesday Russians declined another 6d. at 11s. to 12s., and the Preference 1s. at 12s. to 13s., while on Thursday the latter lost another 1s. per share at 11s. to 12s. To-day's quotations are given in full on page 412.

THE SPIES PETROLEUM COMPANY.

ANNUAL MEETING OF SHAREHOLDERS.

The annual meeting of the shareholders of the Spies Petroleum Co. was held at the offices of the London Chamber of Commerce on Thursday, at noon, the chairman of the company—Mr. J. Annan Bryce, M.P.—occupying the chair.

The Secretary read the notice convening the meeting, after which the directors' report was taken as read.

The directors report stated that the net production of crude oil for the year, after deducting leakage and water, amounted to 6,837,768 poods.

The stock on hand at 1st/14th January, 1905, was 63,725 poods; which, with the net production during the year of 6,837,768 poods; and crude oil purchased, 2,045 poods; total, 6,903,538 poods; of which there were sold and delivered, 5,713,251 poods; and used for fuel, 1,044,817 poods; or a total of 6,758,068 poods; leaving in stock on 31st December, 1905/13th January, 1906, 145,470 poods.

The above figure of net production shews an increase over that of the preceding year of 909,567 poods, or slightly over 15 per cent.

The crude oil sold and delivered, as above, realised Rs. 1,162,126·19, an average selling price of 20·34 copecs per pood. The total cost of drilling and deepening of wells during the year under review has been written off against revenue. The cost of maintaining buildings, machinery, and plant in good condition has also been charged to revenue.

As shewn by the accounts, the net profit for the twelve months ending 13th January, 1906, is £48,422 15s. 1d., to which must be added the amount brought forward from last year, £2,097 7s. 8d., making the total available for appropriation and dividend of £50,520 2s. 4d.

Of this sum your directors have placed:—To general depreciation of leases, buildings, plant and machinery, the sum of £17,250; to reserve against fire and employers' liability insurance the sum of £2,000, or a total of £19,250; leaving available for division the sum of £31,270 2s. 4d., out of which they recommend the payment of a dividend of 7 per cent., absorbing £22,750, and leaving to be carried forward the sum of £8,520 2s. 4d.

The directors have pleasure in informing you that they have just acquired, upon what they consider favourable terms, a plot of land know as Baskakoff, in the eastern part of the Grosny field. This plot is bordered on both sides by plots which have shewn themselves rich in oil at a shallow depth, and is situated in what is now considered to be the best district of the Grosny oil fields. Your directors hope that the borings which they will at once start on this new plot will materially increase the company's production.

The contract with the Vladikavkas Railway Co. for the sale of crude oil expired on the 13th January, 1906 (new style), and your directors are pleased to inform you that they have been able to renew the contract upon favourable terms for a further period of three years.

The high prices of crude oil which prevailed during the greater portion of last year, have continued up to the present time, the latest quotation being about 24 copecs, and there appears to be a probability that prices will continue at a remunerative level.

While the condition of affairs in Russia at various times during the year gave considerable ground for anxiety, and entailed a great strain upon the management at Grosny, your directors are pleased to report that the company's properties suffered no damage.

Upon the whole labour conditions at Grosny during the year under review was very satisfactory, in this respect differing materially from the conditions prevailing at Baku, as, with the exception of a short strike upon the oil fields during February, and a more serious disturbance during the month of October, work at Grosny progressed without serious interruption.

The thanks of the company are due to Messrs. Maresch, Pressler and Culbertson, as well as to the rest of the staff at Grozny, for their courageous and tactful conduct under the trying circumstances which existed during the war.

In moving the adoption of the report and balance sheet, the Chairman referred to the principal items in the accounts, dwelling particularly upon the cost of drilling during the year, which he said had increased during the 12 months from £24,400 to £29,000. That was on account of the large amount of drilling and deepening that had been done during the year. Though the company's production had been an increase on the year, he was sorry that during the last few months it had been smaller than it was during the earlier months, but now again he was pleased to say it had begun to increase. The prosperous result of the year was due not only to the previous writings off of the cost of drilling and deepening, but because the price of oil had during the past year been high in comparison with previous years. As they were well aware, the life of an oil property was only a limited one, and so the directors had directed their attention to the purchase of additional properties. A couple of years ago they purchased the Samkovio plot, and last year they proceeded to purchase a plot known as the Baskakoff plot, which was in the best part of the Grosny field, while they had also taken an option for three plots near their existing Stupin plot as well as other options. They had further made arrangements for the purchase of 50 dessiatines of land in different parts of the Grosny field, and these, on the whole, he thought had fairly good prospects. The speaker then proceeded to refer to the troubles in the Caucasus during the past year, and concluded by moving the adoption of the report, which was seconded by Mr. Grinnell-Milne.

Mr. W. Ritter Von Ofenheim, in a brief speech, referred to the past working of the company, and said that after its first trials, the directors came to the conclusion that they had not come to the land where milk and honey flowed. Since that time, however, the directors had done everything they could for the company's success, and had introduced every possible economy, and in that they were greatly supported by their staff, who had devoted itself heart and soul to the business. From his frequent visits to Russia and the company's property, he could say that no company worked better than they did. They had now gained an experience of the ground, and now they knew not only the stratas of oil at Grosny, but also those of water, and thus they knew exactly where to cement their wells to overcome the water trouble, and also exactly where to drill. That, in itself, was a matter of the most vital importance. With regard to the purchase of the new plots, that was absolutely necessary, for they had found that their older properties were less prolific, and it was imperative that their production should be maintained. The new ground acquired made their company, he believed, the one owning the largest property in Grosny.

As to the political situation, it was somewhat outside their province to touch upon that, but they could only hope that the great Russian empire, with its vast and rich resources, would soon be restored to prosperity.

A Shareholder asked the chairman with respect to the contract entered into with the Vladikavkas railway for the sale of crude oil for next three years whether he could mention the price, but the chairman replied that he thought it better not to mention the figure.

The motion for the adoption of the report and balance-sheet was then put and carried unanimously.

The Chairman then moved the declaration of a dividend at the rate of 7 per cent., and this, being seconded by Mr. Ofenheim, was likewise carried.

The Chairman mentioned that it was necessary to have the confirmation of the shareholders to the appointment of Mr. C. J. Palmer as a director. That gentleman's firm had had a great deal to do with the formation of the company, and the directors felt that his presence on the board would be of very great value to them.

This resolution was put from the chair and carried, Mr. Palmer responding.

Mr. Ofenheim then proposed the re-election of Messrs. Bryce and W. Nelidoff as directors, and this being seconded by Mr. Palmer, was agreed to, the Chairman thanking the shareholders for their continued confidence in him.

The Chairman proposed a hearty vote of thanks to the Grosny staff for the work they had done, and the tactful conduct they had all displayed during the past year, this being seconded and agreed to.

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PRODUCTION OF THE LEADING BAKU FIRMS IN THE FIRST QUARTER OF 1906.

The production of the leading petroleum firms at Baku during the first quarter of 1906, compared to the corresponding period of 1905, was as under:—

	First Quarter, 1906. Poods.	First Quarter, 1905. Poods.
Nobel Bros.	15,860,798	13,503,146
Caspian and Black Sea Society	8,238,973	9,903,084
Mantascheff and Co.	5,032,738	10,711,142
Caspian Society	5,242,567	7,806,716
Baku Naphtha Co.	6,885,774	6,839,093
Moscow-Caucasian Co... ..	5,563,641	8,930,804
Baku Russian Petroleum Co., Ltd.	3,753,675	4,920,678
Zoubaloff	3,330,000	3,910,000
Assadulaeff	3,086,313	1,618,020
Russian Petroleum and Liquid Fuel, Co., Ltd.	2,989,000	5,257,000
Nagieff	2,959,367	3,152,482
Pitoeff and Co.	2,636,800	3,561,850
Aramazd Co.	2,628,760	3,545,500
Bibi-Eybat Petroleum Co., Ltd.	2,673,000	2,672,500
Mirzoeff Bros.	2,141,401	3,978,502
Russian Naphtha Co.	2,338,490	4,419,370
Schibaieff Petroleum Co., Ltd..	2,529,410	2,905,435
Ter Akopoff Co.	1,595,116	1,350,010
Naftalan Co.	1,588,648	2,497,986
Benkendorf and Co.	1,377,121	1,460,630
Kalantaroff and Co.	1,358,000	2,354,000
European Petroleum Co., Ltd.	1,215,100	2,434,000
Tiflis Co. (Bebe-Aibat)	1,280,920	1,981,150
Shikhovo Co.	1,089,486	1,207,001
	86,535,098	110,920,119
Smaller Firms	17,602,474	26,414 532
Total	104,137,572	137,334,651

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BAKU PRODUCTION DURING MAY.

The total production of crude oil at the Baku oil fields in May (o.s.) amounted to 41,750,180 poods, of which 12,138,434 poods were contributed by the Bebe-Aibat field.

AMERICAN NOTES

The Humble Field.—This territory is now passing through a period of great energy, and drilling is being very actively pursued. The production is now estimated at 14,000 barrels daily as against a total production of 10,600 a month ago.

Texas Production.—Texas production is on the increase. The daily average at the end of May was close upon 41,000 barrel, as compared with 37,000 barrels for the corresponding day of April. Humble is the field that accounts for the increase.

From Jennings.—At the end of May the flowing and pumping wells in the Jennings field were said to be producing no less than 24,700 barrels per day, as against 19,300 barrels, which was the average for the preceding few weeks. Jennings is dealt with elsewhere in this issue.

Heavy Shipments of Crude.—According to the current issue of the *Oil Investors' Journal*, the shipments of crude oil from the Gulf Coast districts of America were exceptionally heavy during May. In all, the gross shipments and consumption amounted for the month to almost 3,000,000 barrels.

Another Deal in Illinois Lands.—Another large deal in Illinois oil lands has recently been consummated, the Ohio Oil Co. having purchased the holdings of the J. B. Mayer Oil Co. in Cumberland county. The deal includes the taking over of 21 producing wells, with a production of close upon 600 barrels per day.

The Rocky Mountain Oil Co.—The *Cheyenne Tribune* states that one of the directors of the Wyoming Oil Co. has announced that he has now completed the organisation of the Rocky Mountain Oil Refining Co., with a capital of $1,000,000. The new company proposes to erect a large refinery in Unita county fields in the near future, which will, if possible, be located at Evanston.

Jennings Oil Field Fire.—A communication from Evangeline, La., dated June 1st, states that what threatened at one time to be a very serious fire, occurred in the field that afternoon, when someone set fire to the waste oil which has gathered in one part of the territory. The fire spread to within 100 feet of the Jennings-Heywood million-gallon tank, while for a time the Texas Co.'s steel tanks appeared to be in great danger.

Another Purchase by the Pure Oil Company.—It is reported that the Pure Oil Co. has made another purchase of lower South-west producing property, including all the Syndicate Oil and Gas Company's holdings in the Burton field, in Wetzel county, W.Va. The property consists of leases on 1,300 acres of territory upon which there are twelve oil and two gas wells. Therefore, with the purchase recorded recently of the Fisher Oil Co.'s property by the Pure Oil Co., the latter-mentioned concern now has the whole of the production in the Burton pool.

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO JUNE 18th, 1906.

IN GALLONS.

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COUNTRY.	ILLUMINATING.		LUBRICATING.		RESIDUALS.		GAS OIL. (Solar)		BENZINE.		FUEL OIL.		OTHER DESCRIPTIONS.		TOTALS.	
	Since June 5.	From Jan. 1.	Since June 5.	From Jan. 1.	Since June 5.	From Jan 1.	Since June 5.	From Jan. 1.	Since June 5.	From Jan. 1.	Since June 5.	From Jan. 1.	Since June 5.	From Jan. 1.	Since June 5.	From Jan. 1.
Austria ...	—	874,560	—	354,770	—	48,930	—	—	—	—	—	—	—	—	—	1,289,260
Belgium ...	—	240	15,890	224,710	—	11,000	—	—	—	5,300	—	—	—	1,416	15,890	231,666
Borneo ...	—	210	—	—	—	—	—	—	—	2,580,750	—	240	—	—	—	2,581,200
Canada ...	—	—	—	8,000	10,000	30,000	—	—	—	—	—	—	—	—	10,000	38,000
Germany ...	837,940	2,854,890	36,400	707,460	—	—	—	—	60	2,380	—	—	—	5,890	874,400	3,581,100
Holland ...	—	9,740	—	1,160	—	—	—	—	—	1,080,910	—	271,000	6,240	34,360	6,240	1,396,690
Roumania ...	770,850	2,130,850	—	—	—	—	—	1,035,550	—	—	—	—	—	—	770,850	3,166,400
Russia ...	1,278,400	16,264,290	7,670	995,980	—	—	—	1,604,250	—	—	—	—	—	5,660	1,286,070	18,870,180
Sumatra, &c	—	—	—	—	—	—	—	—	—	976,500	—	—	—	—	—	976,500
U.S.A. ...	1,587,170	45,466,727	902,545	22,348,974	945	524,273	1,323,450	24,494,970	1,061,960	5,583,140	—	9,047,730	3,450	444,430	4,879,520	107,900,154
Other Countries	—	1,370	730	12,350	—	—	—	—	—	480	—	—	—	210,800	730	225,000
	4,474,360	67,602,877	963,235	24,653,404	10,945	614,203	1,323,450	27,134,770	1,062,020	10,229,460	—	9,318,970	9,690	702,556	7,843,700	140,256,150

A NEW DEPHLEGMATOR.

Mr. KHARITCHKOFF'S INVENTION. . . . .

Dephlegmation represents a process in which the vapours of the distilling liquid are submitted to a partial cooling for the purpose of separating from them those which are more easy of condensation.

In the refineries, as well as in the laboratory, this is attained by means of special apparatus, called deflegmators, of a great variety of constructions, yet all on the same principle—the mixture of the vapours of the distilling liquids being submitted to a partial or incomplete cooling.

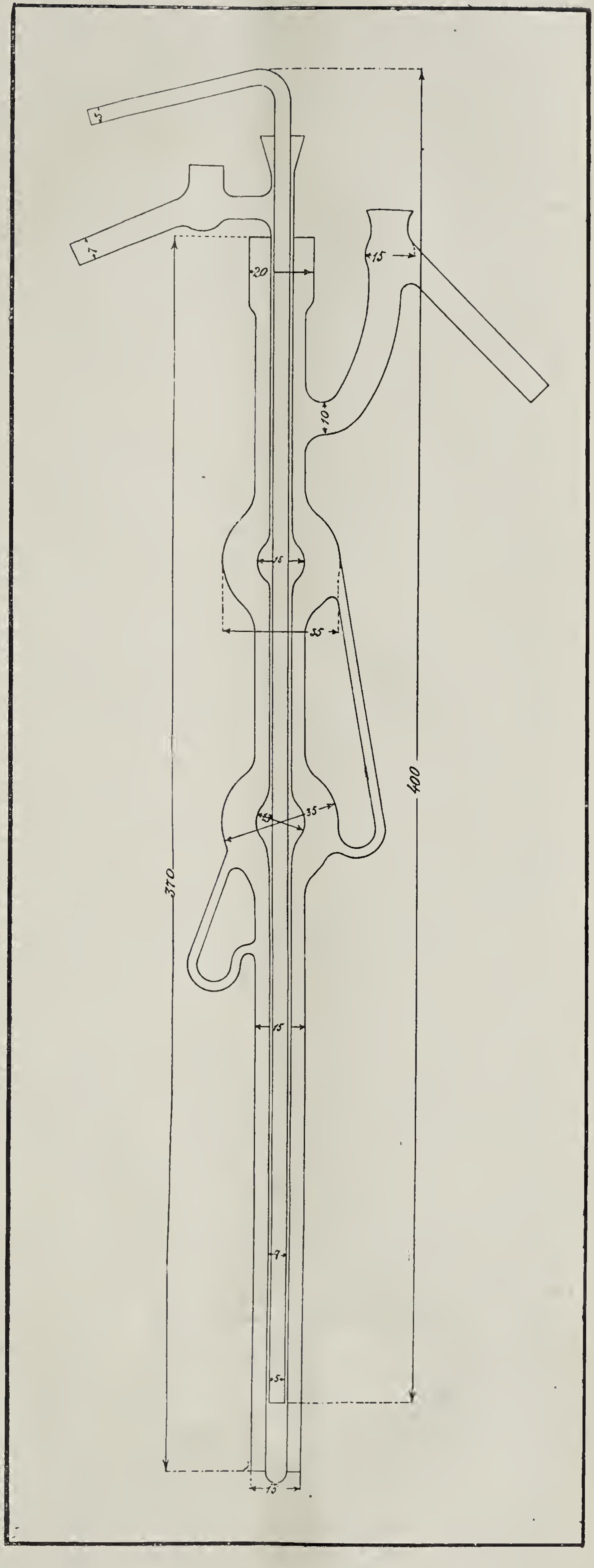
With regard to the method by which this is attained, all the numerous systems of dephlegmators can be classified in two groups :—(1) dephlegmators acting by their surface or air dephlegmators, and (2) dephlegmators in which the cooling process is regulated by the current of a liquid.

The first system is the more simple, but at the same time cannot always be used without special modifications, as the dephlegmation here depends on the cooling surface, and on the difference in temperatures of the vapours liquids and of the air. When this difference is large, in the case of a distillation of a mixture of liquids of very high boiling points, it may happen that there will be no dephlegmation at all, but simply condensation of the distilling liquid. In such a case it is necessary to reduce the surface in proportion to the difference in the temperatures of the vapours and the ambiant air.

After many attempts to design a type of dephlegmator with a regulated temperature, Mr. Kharitchkoff has devised one on the main principle of the Glinsky dephlegmator, by providing it with an internal cooling arrangement, as in the Winsinger dephlegmator, and also increasing its surface. Mr. Kharitchkoff has made good another drawback by providing an aperture *m* for a thermometer to shew the temperature of the water in the internal condenser. Another thermometer for indicating the temperature of the boiling liquid is in T. The details of the construction of the dephlegmator are clearly shewn in the accompanying sketch. The dephlegmator is provided with two outlets for the condensed vapours. At Mr. Kharitchkoff's order, a dephlegmator of this design was made by Messrs. Eberhardt, of St. Petersburg, and tested at the laboratory of the Vladicaucasian Railway at Grosny, by the distillation of crude benzine to 100° C., and ascertaining the quantity of distillate obtained by a second distillation within the same temperature. The following are the results of the tests :—

Type of Dephlegmator.	Percentage of yield of fractions to 100° C. by first distillation.	By Second Distillation.	Product. Benzine, sp. gr.
Winsinger	74·6	72·8	0·711
,,	80·66	83·4	—
Combined Glynski-Winsinger	72·	90	0·6916
,, ,, ,,	62·8	89	0·710
,, ,, ,,	57·6	85·4	0·7203
Glynski	70·8	89·4	0·6916
,,	53·2	89·7	0·7203

The author considers the results obtained by the combination dephlegmator as very satisfactory.



AMERICAN DEVELOPMENTS DURING MAY.

The following details of developments in the American fields during May will be of great interest, as shewing the great activity now being put forward to increase the production of the oil fields:—In the regions producing Pennsylvania oil, there was a heavy gain during May in the number of completed wells, though the gain in the new production was not commensurate with the increased activity. Field work also shewed a gain, but the majority of the operations is in old territory, where nothing but small wells are possible.

While the Pennsylvania and Lima oil regions revealed nothing during the month to warrant any expectations of an increase in production, Illinois is steadily forging to the front as an oil-producing State, and is rapidly extending its productive area in all directions. It completed 436 fewer wells than were completed in the Pennsylvania regions during the month, while its new production was 3,885 barrels larger. Nearly twice as much new work was under way in the Illinois oil fields at the close of May as at the close of April.

Of the Pennsylvanian fields, West Virginia held first place in May, with south-eastern Ohio a good second, so far as new production was concerned; but one division of the old field completed more wells than either West Virginia or South-eastern Ohio. One of the most remarkable features during the month was the large number of wells drilled in one and two-barrel territory. The Venango-Clarion districts, which have been drilled over time, and again during the past 40 old years, completed 192 wells in May. This was an average of seven for every working day in the month. South-eastern Ohio, with 43 more wells to her credit than West Virginia, was behind the old Mountain State in new production by 711 barrels.

In the whole fields, 196 more wells were completed in May than in April, but the gain in new production was only 369 barrels. There was an increase of 12 in the number of unproductive wells, and of 23 in field operations.

There was a gain of seven in the number of completed wells in the Kentucky-Tennessee oil fields during May, accompanied by a loss of 293 barrels in the new production. At the same time there was a decline of five rigs and one well drilling.

The Mid-Continent oil fields completed 176 more wells in May than in April, and the new production shewed a gain of 2,578 barrels. May proved a record-breaking month in the history of these fields, and the amount of the new production has been surpassed on very few occasions. Of the 498 wells completed in May, 52 were dry holes, and 42 were gas wells. The 404 productive wells had an average yield of over 40 barrels.

The May summary of wells completed, new production, etc., for the different oil producing fields is presented in the following:—

State or Territory.	Completed.	Productive.	Dry.
New York	64	187	4
Pennsylvania	366	1,350	60
West Virginia	108	1,813	38
South-eastern Ohio ..	151	1,102	47
North-western Ohio ..	147	1,421	15
Indiana	115	1,502	15
Kentucky and Tennessee	43	385	14
Illinois	253	8,337	37
Kansas	94	722	36
Ind. Ter. and Oklahoma	404	15,814	58
Total	1,745	32,633	324
Total, April	1,173	24,515	273
Increase..	572	8,118	51

TILBURY: CANADA'S NEW OIL DISTRICT.

Particular attention is now being paid by Canadian oil men to the Tilbury oil fields, which are already classed as second to none in Ontario, while it is said there are bright prospects of their heading the list in North America. The oldest operator, who had years of experience, and who had, or have interests in almost every oil field known, becomes more sanguine as the developments are extended. The oldest wells yielding almost as much oil per day as they did when they were drilled in six months ago, and the gas being fully as strong to-day as then, is said to be the cause of so much confidence being exhibited.

All drilling tools available are now at work putting down wells; contracts have been let for many more wells, and tools will be shipped to Tilbury from the States to rush the development as soon as possible.

In many instances, says a writer, in the *Canadian Oil Journal*, the boilers have had to be moved hundreds of feet from the wells to get them out of the constant downpour of the fluid that is forced far above the derricks by the great volumes of gas issuing from the mouths of the wells. Where six months ago a great stretch of naked lands were seen, and where the serenity of quiet country life reigned supreme, is to-day the scene of great activity and excitement. Derricks spring up like mushrooms, large tanks are occupying almost every field, steam is hissing and sizzling upon every hand, and a network of pipes is strewn throughout the fields to conduct gas to boilers for fuel and light.

Teams are on the road night and day drawing oil to market, and material to the scene of action, all of which tends to make Tilbury a desirable field.

A very peculiar and a most noteworthy feature of the field to date is that the latest completions have proved to be the most prolific producers, which fact has served to arouse those who are familiar with oil.

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AMERICA'S PARAFFIN WAX EXPORTS FOR APRIL.

The exports of paraffin wax from America during April were as under, in pounds, the figures for the corresponding month of last year being given for the purposes of comparison:—

	1906.	1905.
United Kingdom	7,922,901	7,690,137
Belgium	23,750	167,879
France..	103,442	27,666
Germany	2,979,492	1,268,072
Italy	1,546,357	882,123
Netherlands	530,235	393,123
Other European Countries ..	239,340	841,469
British North America	28,150	2,951
Cent. America and British Honduras	52,593	82,797
Mexico	780,003	1,874,900
West Indies and Bermuda	—	—
Brazil	23,345	15,503
Chili	—	—
Other South American Countries..	18,000	27,450
Japan	360,540	2,294,008
British Australasia	1,051,775	474,239
Other Asia and Oceanica	46,600	623,248
British Africa..	149,117	142,417
Other African Countries	469,730	—
Totals, pounds ..	16,325,370	16,807,982

THE OZOKERITE DEPOSITS OF UTAH.

Though it has been known for the past quarter of a century that some extensive ozokerite deposits exist in Utah county, it is only recently that efforts have been put forward to turn them into commercial account, and consequently the results of the investigations into the deposits by the officers of the United States Geological Survey have more than ordinary interest. In a report which has recently been completed, it is pointed out that the ozokerite deposits in Utah are located in the north end of the Wisatch Plateau, near the Denver and Rio Grande railroad. This mineral wax occurs here in three groups of localities—(1) in the vicinity of Colton, on the north side of Price River Valley; (2) near and to the east of Soldier Summit, where the railroad crosses the crest of the plateau; (3) near Midway station, on the north side of the canyon, near the source of Soldier Creek and west of Soldier Summit. Colton is seven miles south-east, and Midway three miles west of Soldier Summit.

The Colton and Soldier Summit localities are in Price River Valley, which trends toward the south-east, and has here a rather broad, flat channel. On the south-west the slopes rise gradually with the inclination of the strata. On the opposite side, toward the north-east, beginning half to three-fourths of a mile from the river, the ascent is more abrupt, and is made in a succession of high benches and knobby spurs to the crest of the Roan Cliffs. Midway station is in a gorge that trends westward, near the source of Soldier Creek. Ozokerite deposits occur in the glutches making into the valley from the north side. The surface of the country is clothed with sagebrush, except in the upper stretches of the glutches and valleys facing toward the north and west, where groves of aspen, chokecherry, service and scattering pines grow.

The ozokerite deposits occur in shales, shaly sandstones, and limestone strata in the lower part of tertiary deposits of the "Wasatch" group. The mineral has been found at various positions through a section of about 500 feet of strata. The shales are friable, variously tinted purple, green, blue, and white. The sandstones are moderately soft, and light drab and brown in colour. The limestone beds are thin and brittle, and vary from white to shades of yellow and blue. The limestone deposits occur both below and above the section containing ozokerite.

The rocks are uniformly tilted towards the north-west about 5 degrees. At the localities inspected near Colton, Soldier Summit, and Midway the strata are intersected by fissures and zones of brecciation and parallel jointing. These fissures and spaces between brecciated rock contain the ozokerite, usually as thin films and sheets, but locally as dikelike bodies several inches thick, and it is reported several feet thick in places. The faces of the fissures, and also the brecciated portion of the rock, shew the effects of movement in slickensided surfaces. In many instances also the surfaces of the ozokerite deposits exhibit the same phenomena. The vertical displacements along these fissure veins, so far as could be determined, have been slight where the inspection was made in the mines and prospects. The study of the surface conditions did not reveal appreciable faulting. The fissures and joint planes are almost vertical, and near Colton and Soldier Summit they bear approximately N. 10 deg. W. One-half mile west of Midway station a fracture zone containing ozokerite bears N. 30 deg. W. Another half a mile north-east of the same station has a trend N. 60 deg. W. In both instances the fractures were almost vertical.

Though the ozokerite has been mined or prospected at several points through a stratigraphic range of nearly 500 feet, it has not been shewn that there is any systematic variation in the thickness of the deposits. It has been found to be locally variable, both laterally and vertically.

Nature of the Mineral.—Three samples were selected for laboratory tests, one from the mine half-a-mile north-east of Midway station, a second from the mine at Colton, and a third from the mine 1½ miles north of Colton. These samples were subjected to fusion and solution tests made in the Geological Survey laboratory of Eugene C. Sullivan.

The mineral occurring near Midway and Soldier Summit, and at the mine in the town of Colton, has essentially the same physical appearance. The slight variations in hardness and colour are not greater than are found to occur at a single locality. In places the ozokerite has been crushed and intimately slickensided, as is the case with the material collected from the Colton mine. The mineral is thereby rendered more friable than where such pressure and movement of contract strata has not occurred. Under ordinary conditions the mineral is semi-brittle and slightly friable, but a mass cannot be crushed or molded between the fingers. It cuts easily, somewhat like hard cheese, but does not adhere to the knife. It is for the most part black, and here and there yellowish resinous parts blend with the black. In the Midway mine certain parts were distinctly fibrous and yellow, as if a purer material had been blown into, or had percolated through, open spaces in the darker product.

The mineral at the Midway locality melts at 64 degrees C., is completely soluble in boiling ether, and has a faint petroleum odour. The Colton product melts at 70 degrees C., is incompletely soluble in boiling ether, and has no odour. The material of the third test, from the deposits 1½ miles north of Colton, is entirely black, has a pronounced petroleum odour, and can be moulded in the fingers. Its melting point is 54 degrees C., and it is completely soluble in boiling ether. The mineral from this locality, as well as from others in the vicinity north and north-east of Colton, contained more bitumen or asphalt than the Midway and Colton samples, which accounts for its lack of colour, softness, and lower melting point. In concluding his report on the tests of the samples, the chemist remarks that they behave like paraffin on heating, and are ozokerite or closely related substances.

Development.—The pioneer work and a large part of the development of ozokerite in this region are due to the efforts of Mr. R. J. Kroupa, who began prospecting in the vicinity of Midway in 1886. Mr. Kroupa, who now lives at Provo City, Utah, gave material aid to the writers in the investigation of the ozokerite deposits.

Ozokerite has been exploited commercially at five, and probably more localities in this field. Many prospects in the neighbourhood of these mines have been made, shewing the presence of the mineral. From a few of these surface workings it is reported that a considerable quantity of ozokerite has been removed. Five mines have been equipped with more or less complete facilities for exploitation, and three plants have been established for separating the product from the associated rock materials.

One of the mines in this district is located at Colton. A shaft is sunk on a vertical shear zone five to six feet in width to a depth of 110 feet, and is equipped with a 10 horse-power hoisting engine. Drifts have been run on the strike of the fractures at a depth of 45 feet, and at the base. The mine is now closed, it is claimed, on account of litigation. At the time of inspection, it was filled with water below the 45-foot drift. At this level the brecciated zone consists of broken green and purple shale with sandstone fragments. Ozokerite occurs in scales or thin veins, or as pockets and veins of variable extent, and width not exceeding a few inches at most. Several hundred pounds of the commercial product are on hand, and it is reported that the total output has been about 10 tons.

Another mine has been operated 1½ miles north-east of Colton, very near the south-west corner of sec. 13, T. 11 S., R.S.E. It is on a different fracture zone from that of the Colton mine, and nearly 500 feet higher in the strata. At this place a tunnel has been driven 225 feet N. 10 deg. W., on a shear zone of brecciated sandy shale 4 to 6 feet wide. At the end of the tunnel a drift is driven 125 feet toward the east. A space of vertical fractures is crossed in this drift 65 feet east of the tunnel. A shaft said to be 100 feet in depth has been sunk at the mouth of the tunnel, and drifts run north and south at a depth of 60 feet. The faces of the fractured shale shewed much slickensiding. Small quantities of ozokerite occur here and there as thin films in the joints both in the tunnel and in the drift. The developments here are recent, but the plant was not in operation when visited.

The third mine in the Colton district is 1½ miles north of Colton, and very near the north side of the S.W. ¼ sec. 14, 11 S., R.S.E. At this point a tunnel was driven N., 10 degrees W., following a line of vertical fractures. Ozokerite occurs here in thin sheets following joints and surrounding fragments of brecciated shale. Several prospects have been made on the same line of fissures in the vicinity, exhibiting similar conditions in the occurrence of the mineral. Prospects shewing the presence of ozokerite have been made in the S.E. ¼, sec. 14, and the N.W. ¼ S.E. ¼ sec. 15, and mining to a limited extent has been carried on in the S.W. ¼ N.W. ¼ sec. 24, T. 11 S., R.S.E., on similar north-south lines of jointed and fissured strata. Nowhere in the Colton district has ozokerite been seen by the writer.

Developnents.—The development of ozokerite in this locality is limited to the N.W. ¼ sec 30, T. 10 S., R.S.E., within half-a-mile east and north-east of Soldier Summit. A mine has been equipped with hoisting power, and in connection with it a concentration plant erected nearly one-third of a mile east of Soldier Summit. The mine was closed at the time visited, on account of reported litigation. Mr. Kroupa, who directed the development here, reports that the shaft is 225 feet in depth, and was driven on a band of vertical fissures that contained the mineral wax, and that drifts had been opened 50 feet to the north and south on the strike of the fractures. A north-south shear zone has been prospected one-fourth mile south of the mine. In all cases here the ozokerite is reported to occur in veinlets filling narrow fissures in the strike of the crushed strata, and surrounding the brecciated shale and shaly sandstone. Locally the veins swell to a thickness of nearly 3 feet, according to Mr. Kroupa's verbal report.

Two small mines have been driven on vertical fractures on shale, one situated half-a-mile west, and another a mile north-east of Midway station. The fracture zone in the first instance is 2½ feet wide, and bears N., 30 degrees W. In the other the fractured strata are four to five feet wide, and bear N. 60 degrees W. The ozokerite occurs at three places as variably thin sheets in vertical fissures and surrounding fragments of brecciated rock, in a similar manner to that at Colton and Soldier Summit.

Methods of Concentration.—The manner of separating ozokerite from the associated rocks is a simple process. The plant as described by Mr. Kroupa consists of a steam boiler and engine, a crusher, and steam-heated vats. The soft-rock and ozokerite mixture is crushed and run into long vats with narrow bottoms containing water kept at a boiling temperature. The ozokerite melts at a temperature of 54 degrees to 70 degrees C., and floats off as a liquid into cooling vats, while the rock is driven out along the narrow bottom of the vat by revolving screws. On cooling the ozokerite is remelted in dry pans to remove the content of moisture.

In conclusion, it is well to remark that the extent, either in thickness or length, of the occurrence of ozokerite, as of any other species of the hydrocarbon series found filing fissures or spaces between broken rock, cannot be relied on far beyond the limit of prospected ground. Both the width of the fissured or fractured zone, and the occurrence of ozokerite, are found to be variable. In no instance in this field have ozokerite veins been reported to exceed 3 feet in width. Usually, as has been stated, the mineral is in the form of thin sheets or veinlets in fissures or spaces surrounding brecciated rock. It is evident that for profitable exploitation such ozokerite-bearing ground should contain sufficient mineral wax to form approximately 10 per cent. of the rock removed for treatment.

THE CEDROS OIL FIELDS OF TRINIDAD.

REPORT BY THE GOVERNMENT GEOLOGIST.

(Concluded from page 394.)

The most important results of the survey may be recapitulated briefly as follows :—

(1) The anticlinal structure extends to the western extremity of the island, and presumably through the Gulf of Paria into Venezuela.

(2) Except where inliers of cretaceous strata occur in the heart of the anticline, "shows" of No. 1 oil streak occur at frequent intervals along the crest of the anticline, and in more than one locality on the margins of cretaceous inliers there are outcrops of this oil rock with copious discharge of petroleum.

(3) Approximately 66 miles of the anticlinal crest are shewn on the map; of these 19¾ are in the sea and 46¼ on land.

Of the 46¼ miles, 19 are either occupied by cretaceous strata at the surface, or the presence of cretaceous rocks near the surface is indicated. Hence drilling for oil in these localities might be entirely unsuccessful. Of the 27¼ miles that remain, 8, either from lack of evidence or from less favourable conditions, cannot be recommended at present as areas for development work. The 19¼ miles that remain can be regarded as furnishing favourable propositions for drilling.

The breadth of the belt along which this oil rock will be struck at reasonable depth will be found to vary; it is seldom likely to exceed half-a-mile, or to fall below 200 yards. It is evident that this gives a fairly extensive field for development work.

(4) The horizon of the "No. 4 oil rock" has been definitely established, and proved to be represented by carbonaceous strata and coal seams in some localities, while in other localities both to north and south of the crest of the anticline, it is an oil-bearing rock.

(5) Conditions for the formation of oil appear to be generally more suitable in the western part of the area than in the eastern, owing to the development of impervious clays, and small bands of oil rock occur above the No. 1 oil streak. These may be partly representative of the No. 3 oil streak.

(6) In the western part of the area, gas pressure, as evidenced by explosive discharges, seems to be greater than in the eastern.

As far as can be judged from surface indications and geological structure, the prospects of oil production in many parts of the area are distinctly good. So far as the No. 1 streak is concerned, the sharpness of the anticlinal fold and the presence of underlying masses of cretaceous strata seem to be the only sources of difficulty. The sharpness of the fold will necessitate drilling close to the crest of the anticline, if the oil rock is to be reached at no great depth, and will consequently narrow the field for inexpensive operations.

The presence of inliers of cretaceous rocks causes the lower oil rock to be cut out completely over considerable areas, but it is possible that the more porous beds of the cretaceous formation may be found in certain localities to be impregnated with oil from the tertiaries. It is not unlikely that wells Nos. 1 and 2 at Guayaguayare penetrated into this formation for some distance. The great extent of some of the "shows" of oil where the No. 1 oil rock crops out or approaches near to the surface is suggestive of considerable stores of petroleum at greater depths, while the number and size of mud volcanoes are indications of enormous, if slowly accumulated, gaseous pressure. It is probable that in some districts more than one oil-bearing bed may be tapped about the horizon of the No. 1 streak.

The Rio Blanco sand may prove a valuable addition to the oil resources of Trinidad, though, as has been pointed out, it is only under certain conditions that oil will be found at this horizon. The oil will probably be somewhat heavy and deficient in the more volatile products of distillation, but will doubtless make a good fuel oil. The depth to this oil rock should not exceed 1,900 feet in any part of the area within its outcrop, and it will be possible to reach this horizon in a well in localities where the depth to the No. 1 oil rock is prohibitive of profitable drilling.

In future, the oil rocks forming "No. 1 streak" will be referred to as the Galeota oil sand, while the "No. 4 streak" will be named from the locality where it was proved *in situ* at the surface the Rio Blanco oil sand.

It is essential that experimental drilling should be undertaken to enable an approximate estimate of the posssibilities of oil production to be given, and a definite idea of the cost of development work obtained. The very wide distribution of the oil rocks has been proved, and the geological structure, the lateral variations in the strata, and the constant, or at least very frequent, presence of oil made clear. It remains to be proved what number of barrels per day can be expected from a well under given conditions, and to what depth drilling can be carried on profitably.

It appears probable, though this point is stated with great hesitation, that as the oil fields are developed, no enormous production will be obtained from any one well, but that the baling in series of groups of comparatively shallow wells (not deeper than 1,200 to 1,500 feet at most), each yielding a moderate and steady supply of oil, will prove the most profitable way of working the oil fields. This is largely a matter of conjecture, but the nature of the oil rocks observed throughout the area favours this view. That shallow wells (400 to 800 feet), yielding a steady, if small, supply of oil per diem, can be obtained in many localities, cannot be considered any longer a matter of doubt.

Experimental drilling must be carried on systematically. In the first place wells should be drilled in the neighbourhood of the great gaseous discharges called mud volcanoes, both to north and south of the crest of the anticline, to ascertain if the great gaseous pressure is evidence of a proportionate volume of oil.

In the second place, a well should be drilled in the centre of the anticline where little or no indication of oil is to be seen at the surface. Such a well will prove whether or no the Galeota oil sand is present below the surface, and whether it contains sufficient oil in the locality to justify the expense of more extensive development work.

In the third place the Rio Blanco oil sand should be tested by a well in a locality where shows at outcrop indicate productivity.

In the fourth place, a well should be drilled near one of the cretaceous inliers, where the Galeota oil sand crops out against the older rock. This will give evidence of great value, as outcrops of this nature occur not only on the southern anticline, but in several other districts in the oil territory. It is necessary to ascertain what production can be obtained under such conditions.

Such experimental wells, if successful, would be the first of series reaching the oil rocks at deeper and deeper levels, till the limit of profitable drilling is reached.

Localities have been selected for these experimental wells, and large scale maps (6⅔ inches to the mile) will be prepared, accompanied by brief special reports on each locality, giving as many details and as complete information as has been obtained during the somewhat rapid survey of the southern anticline.

AMERICAN OIL IN MIDDLE CHINA.

In renewing the commercial situation at Amoy and Swatow, the American Consul speaks of the oil trade during the past year. He says that the imports of kerosene for 1904 and 1905 from the United States were 700,050 and 779,530 gallons respectively, while the imports from Sumatra decreased from 2,808,305 to 2,415,755 gallons. This proportionate increase in American oil is illustrative of the increase in the entire territory hereabouts. In 1904, 132,000 gallons of American oil were forwarded to the interior, while the shipments in 1905 were several times this amount. The sales of American oil at Foochow and Swatow, which are affected under the Amoy agency, have increased several hundred per cent. in less than two years. This increase has been effected in spite of the anti-American boycott, which has in every port been particularly directed against American kerosene, in a number of instances at least being directly furthered by foreign competitors of American kerosene. In Amoy, Foochow, and Swatow, arrangements have been completed for the erection of tank installations for American oil, and the prospects are that the eventual result will be the domination of this market by American oil. Kerosene is changing the social and domestic life of the great masses of China's population. A few years ago the enjoyment of an evening of reading or social intercourse was almost unknown to the Chinese family. Both are now possible through the improved means of illumination. The old peanut oil, and other similar industries are dying out. Kerosene is now found far in the interior where foreigners are never seen. The kerosene trade of China is in the hands of Chinese traders, working under American and foreign agents in the larger ports, and this system of sales and distribution ought to be studied by every American concern seeking trade in China.

The Vacuum Oil Co. of Austria-Hungary recently held a general meeting at Budapesth, at which it was resolved to increase the capital of the company from 5,000,000 to 10,000,000 kronen. For this purpose there will be an issue of 500 new shares of a nominal value of 10,000 kronen each.

PATENTS.

Applications for Patents and Patent Applications recently published relating to the Petroleum Industry.

Specially contributed by Messrs. EDWARD EVANS & Co., of 27, Chancery Lane, London, W.C., and 105, Colmore Row, Birmingham, Consulting Engineers, Chartered Patent Agents and Enrolled Patent Attorneys of the United States.

APPLICATION FILED IN GREAT BRITAIN.

Improvements in or relating to apparatus for extracting oil from seeds and the like by means of solvents.—The Premier Oil Extracting Mills, Ltd., and John Caley, Hull. No. 13233 of 1906.

Improvements in devices for separating oil from its emulsions.—Gaudenzio Dalla Zonca, London. No 11950 of 1906.

APPLICATION PUBLISHED IN GREAT BRITAIN.

Means of generating aud using Hydrocarbon Vapers for Heating and Lighting Purposes.—Josephine Marie-Louis Fleming. No. 10616 of 1905.

This invention consists in a combined vapour generator and burner for generating and utilising hydrocarbon and like vapours for heating and lighting purposes; characterised in that the vapour generator has no wick or filling, and is of much greater cross-section than the delivery or discharge tube; that the outlet from said generator, as well as part of said discharge tube, are situated in the flame, and said discharge tube is of a diameter approximately equal to that of the orifice or nozzle through which the vapours are discharged; at said nozzle is situated below the air inlets to the mixing chamber, and the vapours are projected therefrom straight to the flame; and that said discharge tube is led outside the mixing chamber to avoid the current of air entering thereinto without permitting the superheated vapours to cool again.

AMERICAN PATENTS GRANTED.

Oil-Filter.—Charles E. Lefebvre, Pittsbnrgh, Pa.

The combination of an oil-washing chamber, a removable receiving-funnel located in said chamber adapted to discharge the uncleaned oil near the bottom thereof, storage and filtering chambers located adjacent to the washing-chambers, filtering-cylinders located in said storage-chambers having ports communicating with the receiving-chamber, an auxiliary cylindrical tank located adjacent to the top of the receiving-funnel adapted to receive the waste oil as it is delivered from its source of supply, a retaining-flange provided on the casing-top within which the auxiliary tank fits, and a spigot provided in the anxiliary tank adapted extend over the receiving-funnel, the said tank being adapted to be turned in its retaining-flange to remove the spigot from the path of the receiving-funnel.

Pump for Wells.—Arthur N. Ellis, San Bernardino, Cal.

In a pump for wells, a well-tubing, a shaft arranged therein, a propeller carried by the shaft, bearing-brackets within the tubing and provided with bearings for the shaft, a lubricant-receiving pipe surrounding the shaft, and comprising sections connected with the bearing-brackets to protect the bearings thereof from the action of foreign matter elevated with the liquid discharge from the well, the bearing-brackets being provided with oil passages therethrough whereby the lubricant in the lubricant-pipe may pass to the various brackets in the length of the shaft.

Apparatus for the Manufacture of Bisulfite Liquors.—Elliott R. Barker, Berlin, N.H.

An apparatus comprising a tank, a plurality of perforated partitions extending across the interior of said tank, and dividing the same into a plurality of compartments, the lowermost of said partitions located at a distance from the bottom of said tank substantially less than the height of any of said compartments, and forming a gas-distributing chamber, means connecting said chamber to gas receptacles, overflow pipes connecting each of said compartments to the compartments therebelow, the overflow pipe of the lowermost compartments leading to a receptacle for acid, an exhaust pipe and a supply pipe connected to the uppermost compartment, and means to agitate the contents of said compartments.

Distilling Apparatus.—Lambert Kleitz, Chicago, Ill.

In a distilling apparatus, in combination, a boiler, a removable cover thereon having a separate joint with a pipe leading to a condenser tube, a condenser casing around said tube, a separable bracket between the casing and boiler to support the latter, and a pipe connecting the condenser casing and the boiler, and having a coupling which may be opened to disconnect the boiler.

The American Oil Market.

New York, Week ended June 9th.

The situation in the older producing sections shews no improvement, the reports during the past week, while recording the incoming of a few large wells, give a succession of small pumpers as a result of the latest operations, whereas the percentage of dry holes has been larger than during the weeks preceding. The monthly field report made a discouraging exhibit, but nevertheless there is an increase in new work under way in all the more important fields. The average production of all the May wells was less than 7⅞ barrels per day, and that of the producing wells but little over 9⅝ barrels, and this, it is claimed by the producers, is not a tempting outlook; in fact, some contend that at this average the business is not profitable. It appears that the increase in the number of completions resulted in but a small increase in new production. There was an increase of 248 in the number of wells drilled during May, says the *Oil, Paint and Drug Reporter*, and the increase in new production was only 1,329 barrels, or at the rate of less than 5⅜ barrels per well for the increase. There are still quite a number of drillers who appear sanguine they will be able to find good wells in locations as yet untested, but most others entertain the belief that it will be impossible to materially increase the production in the older fields. During the last two months the search for oil in the State of Illinois has increased at a rapid rate, and during May that State has taken first place, the new production amounting to over 8,000 barrels, which is more than the combined new production in Pennsylvannia, West Virginia, Ohio and Indiana. Naturally this has attracted much attention, and drillers from the older producing States have turned their attention to leasing territory in that State. It appears probable that the productive area is much larger than at first supposed, and if further tests prove this to be true Illinois will henceforth be a most important factor in the petroleum producing industry. In the mid-continent fields the production is increasing, there having been an increase of nearly 3,000 barrels in new production in May, and new work is being pushed despite the facts that the stocks above ground are increasing at a rapid rate. Prices are higher, being now quoted at 37@43c. for Batson, as to gravity; Humble, 45c.; Saratoga, 42c.; Sour Lake, 42@51c., as to gravity; Spindle Top, 54c.

Refined and Products.—The demand for refined for export has been rather light during the past week, due to the fact that fewer tank steamers have been on this side. There are no changes in the conditions affecting the various European markets, and the consumption of oil continues large, while the markets rule steady, and the supply of all grades is reported as about up to the average. The engagements during the past week foot up about 175,000 barrels, all for shipment in bulk.

The price for barreled oil has remained firm at 7·80c. for New York loading, and at 7·75c. for Philadelphia loading. The principal foreign markets are steady. Freight rates are firm at 2s. @ 2s. 3d. hence to London, and 2s. 3d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export have been in light request, and sales of about 100,000 are reported. The price of plain tops has been steady at 10·30c. Freight rates are firm.

Crude for export has been in light request, and sales of about 25,000 barrels are reported. Pennsylvania crude is quoted at 7·80c. in barrels.

Crude naphtha continues steady. For export, sales of about 5,000 barrels have been reported.

CLOSING QUOTATIONS.

Crude.		Week ended June 2. 1906.	Week ended June 9. 1906.
National Tran, Certificates	per bbl.	$1·58@1·59	$1·64@1·65
Pennsylvania crude in bbls.	per gal.	7·60	7·75
Pennsylvania crude in bulk		4·70	4·70
Residuum, bbls, for export		6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were:—

	Week ended June 9. 1905.	Week ended June 9. 1906.
Tiona	1·42	1·74
Pennsylvania	1·27	1·64
North Lima	0·86	0·98
South Lima	0·81	0·93
Indiana	0·81	0·93
Canadian Oil:		
Petrolia	1·26	1·37

Refined—For Export.

		Week ended June 2.	Week ended June 9.
Cargo Lots for export	per gal.	7·80	7·80
In bulk		4·70	4·70
Philadelphia loading		7·75	7·75

Refined in Cases—110 Fire Test.

	Week ending June 2.	Week ending June 9.
5,000 to 10,000	10·35	10·35
1,000 to 5,000	10·50	10·50

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended June 2.	Week ended June 9.
120 fire test, S.W.	per gal.	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½.

Naphtha and Gasolene.

	Week ending June 2.	Week ending June 9.
Naphtha, crude, car lots, 68 @ 72 deg.	12·00	12·00
Gasolene 86 deg.	14	14

Pennsylvania Oil Runs from June 1st to June 7th were:—June 1st, 61,251; June 2nd and 3rd, 111,889; June 4th, 36,367; June 5th, 71,685; June 6th, 76,872; June 7th, 77,544. For the month of April, 2,202,441.

The Deliveries of Pennsylvania Oil for the same dates were:—50,042; 115,416; 40,604; 78,840; 97,528; 80,152. For the month of April, 2,138,379

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended June 8th and from Jan. 1, were as follows:—

	Week.	Year.	1905.
Refined, barrels and bulk	187,900	4,871,500	4,821,300
Refined, cases	115,000	6,726,000	9,947,000
Crude, barrels and bulk	26,000	752,300	509,100
Crude, cases	—	187,000	85,000
Naphtha, barrels	5,300	208,500	205,400
Residuum, barrels	33,400	405,800	449,200
Lubricating, barrels	—	149,900	79,400
Total, barrels cde. eq.	365,715	10,592,066	11,499,658

Clearances for the Week.

During the week ended June 8th, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1905.
Refined	10,684,890	212,888,600	219,071,681
Crude	—	227,800	621,744
Naphtha	12,800	8,843,567	6,382,943
Residuum	—	—	3,294,915

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended June 8th	14,246,520
Total from New York, from Jan. 1, 1906	284,762,613
Same period last year	292,717,320
Decrease	7,954,707
From United States, week ended June 8th	24,186,056
Total from United States, since Jan. 1, 1906	505,883,754
Same period last year	538,325,476
Decrease	32,441,722

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The "Review" Shipping List.

JUNE 21, 1905.

(The following abbreviations are used in this table:—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Philadelphia	Sables d'Olonne	P. Del. Break., May 24
ALCHYMIST	Salzaete	Smyrna	P. Gibraltar, June 17
AMERICAN	Honolulu	Del. Break	L. Hilo, June 10
APPALACHEE	San Francisco	Shanghai	Arr. June 4
APSCHERON	Hamburg	Tyne	Arr. Apr. 17
ARAL	Philadelphia	Dover	P. Del. Break., June 9
ARAS	Tyne	Batoum	P. Dover, June 16
ARGYLL	Monterey	Kahul	L. Honolulu, June 2
ASTRAKHAN	Tyne	Philadelphia	Arr. June 10
AUGUST KORFF	Bremen	Philadelphia	P. Nantucket, June 20
AUREOLE	Batoum	Manchester	Arr. June 19
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Tyne	Ibrail	Arr. June 15
BALAKANI	London	Philadelphia	Off I. of. W., June 7
BATOUM	Copenhagen	Tyne	Arr. May 20
BAYONNE	Genoa	Philadelphia	Arr. June 17
BEACON LIGHT	Tyne	Port Arthur (Texas)	P. Prawle Pt., June 2
BEME	Rangoon	Calcutta	L. June 12
BLOOMFIELD	New York	Bombay	L. June 1
BORJOM	—	Batoum	Arr. May 19
BRILLIANT	Amsterdam	Philadelphia	P. Scilly, June 9
BROADMAYNE	Rouen	Tyne	Arr. June 16
BULLMOUTH	Yokohama	—	L. June 9
BULYSSES	Kustendje	Hamburg	Arr. London, June 20
BURGERMEISTER PETERSEN	Philadelphia	Swinemunde	P. Butt of Lewis June 17
CADAGUA	Marcus Hook	Corunna	P. Del. Break., June 10
CALCUTTA (Br. bq.)	San Francisco	Shanghai	Arr. June 7
CARDIUM	Balekpappan	Singapore	Arr. June 18
CAUCASIAN	Philadelphia	London	At Cardiff, June 15
CHARLOIS	Antwerp	Kustendje	L. Const'n'ple, June 15
CHESAPEAKE	Manchester	New York	Arr. June 11
CHESTER	Batoum	Antwerp	P. Gibraltar, June 19/20
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Balekpappan	—	L. Madras, June 16
COWRIE	Singapore	Natal	At Las Palmas, June 16
CYMBELINE	Barry	Constant'ple	P. Barry Island, June 19
CZAR NICOLAI II.	Batoum	Hamburg	L. Const'iple, June 11
DAGHESTAN	Swansea	Batoum	P. Gibraltar, June 17
DAKOTAH	Shanghai	San Francisco	Arr. June 8
DELAWARE	Avonmouth	Philadelphia	P. Barry, June 13
DEUTSCHLAND	New York	Rotterdam	P. Lizard, June 20
DIAMANT	Philadelphia	Copenhagen	P. Butt of Lewis, June 19
ELAX	Singapore	Hankow	Arr. June 18
ELISE MARIE	Philadelphia	Hamburg	L. June 13
ENERGIE	Philadelphia	Hamburg	L. June 15
ERIVAN	Batoum	Liverpool	P. Gibraltar, June 18
EUPLECTELA	Philadelphia	—	L. June 13
EXCELSIOR	New York	Rotterdam	L. June 12
EZIO	—	—	Coasting Peru
FRANCE MARIE	Barcelona	Philadelphia	Arr. June 16
GEESTEMUNDE	Philadelphia	Gothenburg	L. June 13
GENESSE	Liverpool	Tyne	Arr. June 6
GEORGIAN PRINCE	London	Tyne	Arr. June 19
GOLDMOUTH	Singapore	Rotterdam	P. Dungeness, June 20
GUT HEIL	New York	Havana	L. June 9
HAINAUT (Dch. shp.)	Antwerp	Salonica	P. Gibraltar, June 19
HARRY WADSWORTH	Ibrail	Campagna	L. Algiers, June 4
HELIOS	New York	Hamburg	Arr. June 16
HOTHAM NEWTON	Hartlepool	Port Arthur (Texas)	Arr. June 18
HOUSATONIC	Hakodadi	San Francisco	Arr. June 18
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Piræus	Taganrog	Arr. June 13
J. B. AUG. KESSLER	Alexandria	Sumatra	P. Eden, May 8
JAMES BRAND	Thameshaven	Tyne	Arr. Mar. 17
KURA	Ibrail	Vallo	P. Gibraltar, June 19
LA CAMPINE	Antwerp	Philadelphia	P. Lizard, June 12
LA FLANDRE	Ghent	Philadelphia	Arr. June 11
LA HESBAYE	Antwerp	Batoum	Off Ushant, June 16
LA MADALEINE	St. Louis (Rhone)	Antwerp	Arr. June 11
LA VIGUESA	Marcus Hook	Gijon	Arr. May 13
LACKAWANNA	Bangkalis	Port Natal	Arr. June 8
LE COQ	River Gironde	Philadelphia	Arr. June 10
LOUTSCH	Messina	Novorossisk	L. Const'ple, May 5
LUCERNA	Bergen	Tyne	Arr. June 8
LUCIFER	Newport	Philadelphia	P. Old Head of Kinsale, June 7
LUCIGEN	Tyne	Batoum	P. Dardanelles, June 15
LUCILINE	Batoum	Rouen	L. Const'iple, June 16
LUMEN	Novorossisk	Hamburg	L. June 15
LUX	Rouen	Tyne	Arr. May 17
MAKKAVEI	Batoum	Odessa	L. Apr. 21
MANHATTAN	Malta	Kustenje	P. Dardanelles, June 15
MANNHEIM	Rotterdam	Philadelphia	P. Prawle Pt., June 14
MARGARETHA	Kustendje	Leghorn	P. Zea, June 3
MEXICAN PRINCE	Liverpool	Cienfuegos	L. Porto Rico, June 14
MIRA	Singapore	Balekpappan	L. June 14
MUREX	Shanghai	—	L. June 13
NARRAGANSETT	London	New York	Arr. June 19
NERITE	Balekpappan	—	L. May 31
NEW YORK	Southampton	New York	Arr. June 16
OCEAN	New York	Amsterdam	Arr. June 3
ORANJE PRINCE	Banes	Flushing	Arr. June 15
ORIFLAMME	Philadelphia	Rouen	P. Havre, June 19
OSCEOLA	Boston	Brunswick	Arr. May 31
OTTAWA	Philadelphia	Tampico	P. Del. Break., June 3
OURAL	Batoum	Thameshaven	P. Constanti'ple, June 17
PALEMBANG	Bangkok	Palembang	L. Apr. 7
PAULA	Tyne	New York	P. Butt of Lewis, June 7
PECTAN	London	Galveston	L. Emdem, June 20
PENNOIL	Tyne	Philadelphia	Arr. June 10
PERLAK	Pladjoe	Singapore	Arr. Apr. 30
PHOEBUS	Hamburg	New York	P. Dunnet Head, June 20
PINNA	Barry	London	Arr. June 10
POTOMAC	Belfast	Philadelphia	P. Torr Head, June 7
PROMETHEUS	Hamburg	New York	P. Dunnet Head, June 20
PRUDENTIA	Middlesbro'	Sulina	P. Peniche, June 15
RION	Penarth	Batoum	L. June 16
ROCK LIGHT	Cardiff	Port Arthur (Texas)	Arr. June 16

Vessel.	From.	For.	Latest Date and Position.
ROSSIJA	Tyne	Batoum	P. Ushant, June 19
ROTTERDAM (Now C. F. Tietgen)	New York ..	Rotterdam ..	P. Scilly, June 20
RUSSIAN PRINCE	Philadelphia	Havana	L. June 3
SALAHADJI	Singapore ..	Balekpappan	L. Apr. 21
SEMINOLE	Muroran	Calcutta	L. May 30
SILVERLIP	Cardiff......	Borneo	Arr. Table Bay, June 10
SINGU	Rangoon....	Bombay	L. June 7
SNOWFLAKE	Port Arthur (Texas)	Antwerp	L. Norfolk, June 14
SOPHIE	Messina	Batoum	P. Const'iple, June 12
SPONDILUS	Tyne	Singapore ..	At Port Said, June 17
STANDARD	Philadelphia	Stockholm ..	L. June 16
STROMBUS	Singapore ..	—	L. May 19
SURAM	Port Talbot	New York ..	Arr. June 15
SUWANEE	Kustendje ..	London	P. Gibraltar, June 15
SVIET	Batoum	Odessa	L. June 1
TELENA	Singapore ..	Hong Kong	Arr. June 13
TEREK............	Manchester	Port Arthur (Texas)	Arr. June 12
TIFLIS	Hamburg ..	Batoum	P. Sagres, June 13
TIOGA	—	—	In Pt. Liverpool, June 16
TONAWANDA	Newcastle .. (N.S.W.)	San Francisco	Arr. June 16
TROCAS	Shanghai ..	Balekpappan	Arr. June 13
TURBO	Philadelphia	Amsterdam	Arr. June 18
TUSCARORA......	Calcutta	San Francisco	L. May 24
TWINGONE	Calcutta	Rangoon....	L. May 25
VEDRA	Ibrail	Bordeaux ..	At Pauillac, June 16
VILLE DE DIEPPE	Dieppe	Havre	Arr. Apr. 26
VILLE DE DOUAI	Philadelphia	Calais	L. June 15
VOLUTE	Singapore ..	Soesoe......	Arr. June 19
WEEHAWKEN	Barrow	New York ..	L. June 14
WILLKOMMEN ..	Tyne	Philadelphia	P. Dunnet Head, June 13
WINNEBAGO (late Kinsman)	Hong Kong	San Francisco	Arr. June 18

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

June 22d, 1906.

The prices of refined petroleum are unaltered, the latest quotations being:—

Russian and Roumanian, 6d.; American, 6¼d.; Water White, 7¾d.

LUBRICATING OILS

are quoted lower for the American brands.

American pale, £7 to £9 10s.

American dark cylinder, from £7 2s. 6d.

American filtered cylinder, from £11.

No. 1 Russian, £10 7s. 6d.

TURPENTINE.

American Turpentine has been weak since our last report, and is now quoted for spot, 46s. 6d.; July to December, 43s.

LIVERPOOL OIL MARKET.

June 21st.

Refined oils are quiet, and sellers now quote 5⅞d. for Russian, Galician or Romanian; and 6⅜d. to 7⅞d. per gallon for American.

Petroleum Spirit continues at 9d. to 10d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, June 21st.

Refined, in cases, is steady at 10·30; Standard White, 7·60; Credit balances, 1·58c.

Philadelphia, June 21st.

Standard White is quoted at 7·55.

RUSSIA.

Baku, June 16th.

The Baku oil market is firm. The prices are: Light crude oil, spot, 24¾ to 25 copecs per pood; kerosene, in waggons, spot, 25 copecs; kerosene in ships, delivery during navigation, 25 copecs; residuals in ships, spot, 26½ to 26¾ copecs.

BELGIUM.

Antwerp, June 15th.

The petroleum market is unchanged. Price of Standard White, spot, 19½ francs per 100 kilos.; July, 19⅝ francs, and four last months of the year 20 francs

FRANCE.

Paris, June 16th.

Illuminating oil is quoted in bulk, in whole tank waggons, 20·25 francs per hectolitre; spirit, 25·25 francs per hectolitre. Special white oil, 28·25 francs per hectolitre.

GERMANY.

Hamburg, June 16th.

The kerosene market is firm. The price of American Standard White is 7·10 marks per 50 kilos.

ROUMANIA.

June 14th.

Prices of petroleum products inland and export are without change from our last quotations.

INDIA.

Bombay, June 1st.

Petroleum steady.

Standard Oil Co., of New York.

Current rates are:—

American, "Snowflake," 150 deg.	Rs.	6	0	2
,, Chester, 125 deg.		4	8	0
,, Monkey Brand, 125 deg.		4	2	2
,, Bulk, 125 deg. (in local made tins).. ..		3	10	0
,, ,, 125 deg. (8 Imperial gallons) ..		3	0	0
,, "White Camelia" brand, 125 deg. ..		4	0	2

The Asiatic Petroleum Company, Limited.

Current rates are:—

Borneo oils, in tins, per pair	3	2	0
Sumatra "Rising Sun," bulk, per unit	3	0	0
,, ,, tins, per pair	3	10	0
Silverlight cases, per case	4	8	2
Russian, "Anchor," cases	4	14	0

BORE HOLES FOR OIL
Contracted for by
JOHN M. THOM,
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Patricroft, MANCHESTER.
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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE FIVE DAYS ENDED JUNE 11TH, 1906—

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
June.	London—			
6	Park and Co..	Lub.	520	Marseilles
6	Anglo-American Oil Co. ..	,,	100,000	Philadel.
6	Scott's Wharf	,,	4,000	New York
8	Mordaunt Bros.	,,	2,400	Philadel.
8	T. S. Harris and Co. ..	,,	2,500	,,
8	Anglo-American Oil Co. (Cymbeline)	Lamp	282,020	,,
8	,, ,,	Gas	1,323,450	,,
9	Consolidated Pet. Co. (Rion)	Lamp	417,480	Hamburg
9	,, ,,	,,	417,480	,,
9	T. H. Lee	M.Lub.	280	,,
9	J. Barber and Co.	L.Gr.	1,100	
11	London Oil Storage Co. ..	Lub.	4,800	Philadel.
11	Grindley and Co.	,,	2,800	New York
11	G. W. Sheldon and Co. ..	Lub.C.	240	,,
11	Scott's Wharf	M.Lub.	2,000	,,
	Liverpool—			
6	Meade-King, Robinson & Co.	Lub.	4,000	,,
6	,,	,,	4,800	Baltimore
6	Liverpool Storage Co. ..	,,	7,240	New York
7	W. B. Dick and Co. ..	,,	4,410	Philadel.
7	Crew, Levick and Co. ..	,,	13,230	,,
8	Geo. B. Taylor	,,	8,640	,,
8	Meade-King, Robinson & Co.	,,	6,400	,,
9	George B. Taylor	M.Lub.	22,400	,,
9	Vacuum Oil Co.	Lub.	4,480	New York
11	Liverpool Storage Co. ..	,,	4,400	,,
11	E. H. Kellogg and Co. ..	M.Lub.	2,000	,,
11	A. Hopps and Sons	Resid.	10,000	Montreal
	Barrow—			
8	Anglo-American Oil Co. (Weehawken)	Naph	1,045,750	New York
8	,, ,, ..	,,	16,000	,,
8	,, ,, ..	,,	210	,,
	Bristol—			
7	H. R. James and Sons ..	Lub.	35,600	,,
7	W. Smith and Co.	,,	29,800	,,
7	,, ..	Lamp	6,400	,,
8	,, ..	Lub.	2,000	,,
9	Ang.-Amer. Oil Co. (Delaware)	R. Lamp	1,298,750	,,
	Hull—			
7	Hull & Netherlands S.S. Co.	Tar oil	3,500	Rotterdam
8	Thos. Wilson, Sons and Co.	Lub.	240	Hamburg
11	Consolidated Pet. Co. (Aras)	R. Lamp	1,278,400	Batoum
	Manchester—			
6	A. Peploe	M.Lub.	1,200	Philadel.
6	Geo. B. Taylor	,,	163,960	,,
6	Crew, Levick and Co. ..	,,	29,700	,,
6	Worthington and Boler ..	,,	1,680	,,
6	W. Hodgson and Co. ..	,,	2,970	,,
6	Liverpool Storage Co. ..	,,	2,470	New York
	Newcastle—			
7	Tyne-Tees S.S. Co... ..	,,	600	Antwerp
7	,, ..	,,	1,040	,,
9	,, ..	,,	1,000	,,
	Newport—			
7	Morday Jones and Co. ..	M.L.Gr.	230	Antwerp
	Dundee—			
7	D. Alexander and Sons ..	Lamp	800	Hamburg
	Glasgow—			
6	J. and A. Allan	M.Lub.	39,200	Philadel.
6	,, ...	M.Colza	1,050	,,
			6,615,620	
	Deduct to correct—			
	London—			
5/5	Ang.-Amer. Oil Co. (Suwanee)	Naph.	115,200	
	Total for Five Days ..		6,500,420	

Note :—

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
	London—			
31/5	Anglo-American Oil Co. (Balakani)	Lamp	2,932,820	New York
31/5	,, ,,	Lub.	103,860	,,

The ship's name should be Naragansett; other particulars correct.

FOR THE WEEK ENDED JUNE 18TH, 1906—

Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
June	London—			
12	Fielder, Hickman and Co. .	M. Lub.	11,200	New York
13	A. Brown and Co.	,,	240	Hamburg
13	,, ...	,,	8,000	Philadel.
14	R. Park and Co.	,,	210	Marseilles
14	G. W. Sheldon and Co. ..	M.L.G.	120	Antwerp
14	W. Balchin	Lub.	2,000	Newp't Nws.
15	Mordaunt Bros.	,,	53,700	,,
15	T. H. Lee	M.Lub.	930	Hamburg
15	London Oil Storage Co. ..	Lub.	2,980	,,
15	J. W. Baker	,,	2,550	Philadel.
18	G. W. Sheldon and Co. ..	L.Gr.	1,005	New York
18	,, ...	Lub.Gr.	600	Antwerp
18	Argo Steamship Co. ..	Benz.	60	Bremen
18	General Petroleum Co. (Bulysses)	Lamp	770,850	Constantza (Roumania)
18	Mordaunt Bros.	Lub.	2,500	Philadel.
	Liverpool—			
12	Meade-King, Robinson & Co.	M Lub.	12,000	Hamburg
13	Vacuum Oil Co.	Lub.	5,600	Philadel.
14	Liverpool Storage Co. ..	M.Gr.	20,600	,,
14	Worthington and Boler ..	M.Lub.	5,400	,,
14	Geo. B. Taylor	Lub.Gr.	4,000	,,
14	Meade-King, Robinson & Co.	M.Lub.	10,400	,,
14	,, ..	M.Gr.	3,000	,,
15	Crew, Levick and Co. ..	M.Lub.	12,640	,,
15	E. H. Kellogg and Co. ..	Lub.	2,000	New York
15	Valvoline Oil Co.	,,	7,995	,,
16	Crew, Levick and Co. ..	M.Lub.	4,270	Baltimore
16	A. Goold	,,	24,000	,,
16	Meade-King, Robinson & Co.	,,	54,800	,,
18	G. B. Taylor	Lub.	49,920	New York
18	W. Johnston and Co. ..	,,	7,650	Baltimore
18	W. H. Jennings	,,	1,150	Hamburg

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QUALITY TELLS.

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Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
June				
	Bristol—			
11	H. R. James and Sons ..	Lub.	5,400	New York
11	,, ..	M. Colza	2,400	,,
11	W. Smith and Co.	Lub.	53,960	,,
12	Pickfords	M.Lub.	360	,,
12	H. R. James and Sons ..	,,	2,000	,,
13	Ferris Co., Ltd.	Resid.	945	,,
	Hartlepool—			
12	W. Hartlep'l Steam Nav. Co.	M.Lub.	80	Hamburg
	Hull—			
13	Wilson, Sons and Co. ..	Lub.	1,000	Riga
13	Hull and Neths. S.S. Co. ..	Tar Oil	2,740	Rotterdam
13	Wilson, Sons and Co. ..	Lub.	2,520	Antwerp
13	,, ...	,,	120	,,
13	,, ...	,,	600	New York
14	,, ...	Lub.	4,080	Antwerp
16	,, ...	,,	1,600	Hamburg
18	,, ...	,,	240	Antwerp
	Goole—			
18	Goole Steamship Co. ..	,,	140	Hamburg
	Grimsby—			
29	J. Sutcliffe and Sons ..	,,	280	Antwerp
	Manchester—			
11	Liverpool Storage Co. ..	M.Lub.	2,475	Philadel.
13	Meade-King, Robinson & Co.	M.Lub.	30,400	Philadel.
15	G. B. Taylor	,,	4,800	New York
18	W. Hodgson and Co. ..	,,	6,190	Riga
	Newcastle—			
13	Tyne-Tees S.S. Co. ..	,,	1,400	Hamburg
13	,, ...	,,	240	,,
18	,, ...	,,	2,120	Antwerp
	Swansea—			
11	Burgess and Co.	M.L.P.	180	Hamburg
	Glasgow—			
15	Clyde Shipping Co... ..	M. Lub.	1,980	Antwerp
	Leith—			
23	J. Currie and Co.	Lub.	13,350	Hamburg
12	J. Cormack and Co. ..	M.Lub.	480	Riga
12	W. G. Yool and Co. ..	Lamp	2,180	Hamburg
18	J. Currie and Co.	Lub.	480	,,
			1,227,120	
	Add to Correct			
	Middlesbro'			
6	J. J. Sutherland	M.Lub.	960	Antwerp
	Total for Week		1,228,080	
	Total for the past Fortnight ..		7,728,400	

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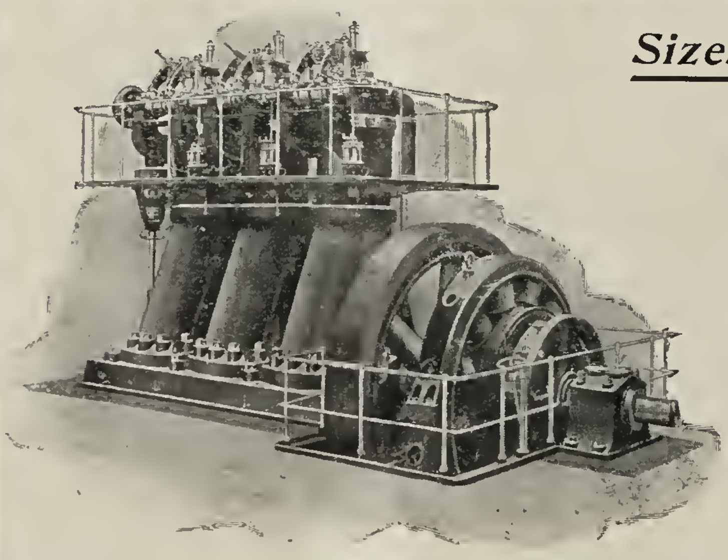

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